UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105

April 14, 2004

Mr. Steve Hill
Air Pollution Control Officer
Bay Area Air Quality Management District
939 Ellis Street
San Francisco, CA 94109

RE: EPA Review of Draft Title V/ Major Facility Review Permits:
Chevron Products Company (Richmond) #A0010,
ConocoPhillips Company #A0016 (Rodeo),
Shell Oil Products US #A0011 (Martinez),
Tesoro Refining and Marketing Company (Martinez) #B2758 & B2759,
Valero Refining Company #B2626 (Benicia)

Dear Mr. Hill:

We are enclosing with this letter our comments on the draft revised permits for Chevron Products Company; ConocoPhillips Company; Shell Oil Products US, Tesoro Refining and Marketing Company; and Valero Refining Company. Thank you for the opportunity to provide comments on these draft revised permits. We understand that the District will submit proposed revised permits to EPA pursuant to 40 CFR section 70.8. Please note that in addition to the comments we are submitting today, our review of the proposed revised permits may generate additional EPA comments.

We look forward to continuing to work with the District during this process. If you have any questions concerning our comments, please contact me at (415) 972-3974 or Ed Pike of the Permits Office at (415) 972-3970.

Sincerely,

/s/

Gerardo C. Rios
Chief, Air Permits Office

Enclosures

cc: Adams, Broadwell, Joseph & Cardozo - Daniel Cardozo, et. al.
California Air Resources Board - Mike Tollstrup
Chevron Products Company - Jim Whiteside
Communities for a Better Environment - Will Rostov
Conoco-Phillips Company - Willie W. C. Chiang
Golden Gate University - Marcie Keever, et al
Shell Martinez Refinery - Aamir Farid
Tesoro Refining and Marketing Company - J. W. Haywood
Valero Refining Company - Douglas Comeau

Enclosure A - General Comments
April 14, 2004 Update to EPA's September 26, 2003 Comments

ELECTROSTATIC PRECIPITATORS

As we noted in our original 9/26/03 comments, the ESP parameter monitoring (current and temperature) in the Chevron permit is a good example of what can be included in Tables II and VII of the Shell, Tesoro, and Valero permits (Conoco does not operate an ESP)[1]. The March 2004 Shell and Valero permits do not have such operating parameters in Table II (the Valero permit lists opacity monitoring). Also, while the Tesoro permit states that operating parameters will be determined later, it does not say what types of ranges or parameters will be used. Please see the detailed enclosure for additional source-specific comments on including operating parameter for each of the ESPs.

FEDERAL ENFORCEABILITY

9/03 EPA Comment: We appreciate the District's commitment to mark SIP-approved regulations as federally-enforceable throughout the permit. For instance, citations to SIP Regulation 9-1 are inconsistently labeled in the permits and must be corrected to indicate that the rule is federally enforceable. In our comments we have pointed out a few instances, but we are not able to point out each example of where a condition was marked not federally enforceable, but should have been marked "yes" instead.

District Response (#1):
Chevron: The requested change has been made.
Phillips: All references to 9-1-313.2 already flagged as federally enforceable.
Shell: The requested change has been made.
Valero: All references to 9-1-313.2 already flagged as federally enforceable.
Tesoro: The requested change has been made.

Supplemental EPA Comment:
The District has made several changes to the federal enforceability of Regulation 9-1, however, the following revisions should still be made. In addition, there are problems with the federal enforceability of several other rules and conditions in Chevron's permit that should also be addressed.

Conoco: Please add a SIP version of 9-1-313 to Table IV-U.

Shell: Please add a SIP version of 9-1-313 to Table IV-AQ and IV-DV. The federal enforceability designation was deleted from Table VII-AH and VII-CY for BAAQMD 9-1-313.2,

[1] *We also note a concern regarding a change to the source testing for FCCU emissions controlled by the ESP at Chevron in Enclosure B.*

but no corresponding federally enforceable SIP limit was added. Please add the SIP version of 9-1-313.2 to these tables.
Chevron: Table VII.A.3.2 appears to contain a number of errors. It does not have any federal enforceability designation for the 50 ppm H_2S limit on p. 406. This limit is pursuant to Condition 8773, Part 5 (BACT) and should be federally enforceable. In addition, the permit does not mark as federally enforceable the fuel flow meters necessary to determine compliance with the "firm" throughput limits for these non-grandfathered units (see p. 406-9, etc, and Tables II A-1 and A-2 for units S-4042, S-4043, S-4044, S-4045, S-4061, S-4062, S-4068, S- 4070, S-4071, S-4072, etc). Also, it appears that in the existing permit, Condition 8773, Part 1a is incorrectly marked not federally enforceable in Table IV.A.3.2. Since the citations in the condition are NSR requirements for BACT and offsets (see section VI), they should be marked federally enforceable.

Table VII.A.5.1 does not contain any federally enforceable NOx limits. The District should either mark the current District Regulation 9, Rule 10 limits as federally enforceable, or add the federally enforceable limits from SIP Regulation 9-10, along with federally enforceable monitoring.

In Regulation 9-8-530, the hours of operation limitation to qualify for exemption is marked not federally enforceable. The District should either include the SIP-approved Regulation 9-8 limits on hours of operation and mark them federally enforceable; add the SIP emissions limits to the permit; or show that the current District rule is at least as strict as the SIP rule, and mark it federally enforceable in the permit (Table VII.A.3.1 for internal combustion engines, p. 417).

FLARES and THERMAL OXIDIZERS

9/03 EPA Comment: We understand that the District intends to re-evaluate the permit conditions for flares and impose the correct applicable requirements in the permits. We believe that the revised Statement of Basis for each permit must document the reasons for each applicability determination, including but not limited to NSPS Sub-parts A (including 60.18) and J; 40 CFR part 63 subpart CC; and each of the Reg 8 Rules (Reg 8-2, Reg 8-18, Reg 8-28, etc). To document these determinations, the District must identify what sources are controlled by each flare, the basis for any NSPS or other non-applicability determination, and whether they are used for routine flaring or emergencies and upsets only (Comment #2).

We appreciate the District's commitment to include the monitoring required for each flare to determine compliance with NSPS Subpart J, including fuel H_2S monitors for those flares subject to the fuel H_2S limit (Comment #3). Please also include record-keeping and reporting requirements for those flares subject to NSPS J but exempt from the fuel H_2S limit (Comment #4). We also understand that the District will include opacity monitoring on process flares for compliance with Ringelmann/opacity Regulations 6-301 & 302 and each of the requirements that apply on a unit-specific basis, and mark all flame monitoring as "continuous" monitoring (Comment #5). Where the necessary Title V monitoring coincides with the District's Regulation 12-11 flare monitoring rule, the District may list Reg 12-11 as the monitoring that will satisfy Title V if it is listed as federally enforceable (Comment #5a). For

sources that must meet a given control efficiency, the District must include a compliance determination and monitoring method for those requirements (Comment #6).

For thermal oxidizers, the permit evaluations must also contain the applicable requirements (Comment #7). The permits must also require monitoring the flow rate if necessary to determine compliance with residence time requirements. This monitoring is in addition to the temperature monitoring that the District already includes (Comment #8).

Please see some source-specific flare comments in our attachments for specific refineries.

District Response (#2-8):
#2: The District has incorporated in the permit requirements applicable to flares to the extent supported by available information and analysis. The District agrees with the comment that further analysis would be useful, and plans to conduct that analysis in connection with a proposed permit revision that will be circulated for public comment within 30 days. To the extent that determinations made at initial issuance can be supported with further documentation and analysis, the District will do so.

#3: The District has not committed to include fuel H2S monitors for flares subject to the NSPS limit. The District has committed to including the monitoring explicitly required by NSPS Subpart J.

#4-5a: The suggested change should be implemented, but additional public review is required first. The change has not been made in the permit, but will be included in a proposed permit revision that will be circulated for public comment within 30 days.

#6: The District is gathering information from the refineries on flare design and use. That information will be used to revise the flare applicability and monitoring determinations. These will be included in a proposed permit revision that will be circulated for public comment within 30 days.

#7: The argument supporting a suggested change does not provide sufficient information or analysis to support the change. No change has been made to the permit.

#8: The comment merits consideration as a future revision to the permit. However, the District believes the proposed permit conditions are appropriate at least for the time being. The District will consider incorporating the suggestion at a later date. It is uncertain whether and to what extent monitoring flow rate would be help assure compliance with residence time requirements. The District will consider incorporating the suggestion at a later date.

Supplemental EPA Comment [#3 removed]:
The District has made many changes to improve permit conditions relating to flares. EPA has identified several areas, however, that still need to be addressed. Below is a general discussion of these areas, including NSPS Subpart J and A applicability, monitoring under NSPS Subpart J, opacity requirements, and monitoring to assure compliance with control efficiency requirements. Thermal oxidizers are also included in this discussion. Comments for individual flares and thermal oxidizers at each refinery follow the general discussion.

#2:

(a): The SOB for each permit should document the applicability determinations for 40 CFR Part 60 Subparts A and J, and Part 63. In addition, each permit should clearly

identify the equipment controlled by each flare. This information is important to allow verification of certain applicability determinations, such as Section 60.18 and Part 63, Subpart A. For instance, Section 60.18 only applies to control devices used to comply with the applicable Subparts of 40 CFR Parts 60 and 61. It is difficult to know if a flare is controlling a process unit that is subject to 40 CFR Parts 60 or 61 without first knowing what unit the flare is controlling.

(b): The District indicates in the revised SOB for Shell that NSPS Subpart A is not applicable to those flares that are used only for process upsets and emergency malfunctions:

> "40 CFR Subpart A has been deleted from Table IV-AXa for A101, A102, and A103. Table IV-CX for S4201 is correct (it is also not subject to 40 CFR 60 Subpart A). All of these flares (A101, A102, A103, and S4201) are exempt from Subpart J, in accordance with 60.104(a)(1), because they are only used for process upset/malfunction."

EPA believes, however, that flares used for the combustion of process upsets and emergency malfunctions are only exempt from Section 60.104(a)(1), not NSPS Subpart J in its entirety. 60.104(a)(1) states:

> "No owner or operator subject to the provisions of this subpart...shall burn in any fuel gas combustion device any fuel gas that contains hydrogen sulfide (H_2S) in excess of 230 mg/dscm (0.10 gr/dscf). The combustion in a flare of process upset gases or fuel gas that is released to the flare as a result of relief valve leakage or other emergency malfunctions is *exempt from this paragraph*."

Thus the only flares that are not considered an affected facility under NSPS Subpart J are those that were built before June 11, 1973 and have not been modified since. Flares that are exempt from the limit in 60.104(a)(1) are still affected facilities and are therefore still subject to the applicable requirements of NSPS Subpart A, such as 60.11(d). Flares that are not used as control devices to comply with applicable subparts of Parts 60 and 61 are not subject to Section 60.18, but are still subject to the other applicable sections of NSPS Part 60 Subpart A.

(c): We request that the District revise the permits to clarify the applicability of Rule 8-2, Miscellaneous Operations, to flares. The revised SOB for each permit states that, "A source is exempt from District Regulation 8 (and therefore from Rule 8-2), if, pursuant to Rule 8-1-110.3, organic compounds are reduced by at least 90% due to abatement by incineration." However, only the Chevron permit contains a condition requiring flares to comply with a 90% control efficiency pursuant to Rule 8-1-110.3. The Tesoro permit addresses the applicability of Rule 8-2 through a shield based on the fact that Tesoro's

flares are subject to Regulation 10, although the Tesoro permit only applies Regulation 10 to some of these flares (please see related comment for Tesoro, below). The SOBs for the Conoco-Phillips, Shell and Valero permits do not address the applicability of Rule 8-2 in any way. Therefore, we request that the District revise the permits to address the applicability of Rule 8-2 to the flares at Conoco-Phillips, Shell, and Valero.

#4: Several flares at the refineries are affected facilities under 40 CFR Section 60.104(a)(1), except when they are combusting process upset gases and fuel gases resulting from emergency malfunctions. The District is proposing to exempt several flares at the Chevron, Conoco-Phillips, Shell, and Valero refineries from the requirements of Section 60.104(a)(1) because these flares are not designed to burn anything other than process upset gases or fuel gases that result from emergency breakdowns. However, the District notes in the revised SOBs that the physical construction of several of these flares enables routine flaring to occur. To address this, the District has added a federally enforceable permit condition restricting these flares to emergency malfunction and process upset use only. While we agree with the District's approach, we are concerned that the District has not included a method to determine compliance with this condition, nor explained how routine releases will be handled to prevent combustion by exempt flares.

To assure compliance with the exemption criteria under Subpart J and the federally enforceable permit condition mentioned above, please add a federally enforceable condition requiring that the permittee record the time, duration, and cause of each flare event at these flares. Please also explain how routine releases will be handled (i.e. if a flaring event does not qualify as a process upset, then the flare is out of compliance or should meet the requirements of a non-exempt flare during that flaring period). Alternatively, the sources may eliminate continuous and intermittent gas streams, or install, maintain and operate a flare gas recovery system.

#5: The permits appear to contain inconsistent requirements with respect to Regulation 6. For instance, Chevron's permit requires compliance with Rules 6-301 (opacity), 6-305 (visible particles), 6-310 (particulate weight), and 6-311 (general operations) with visual inspection for monitoring; Valero's permit lists only Rule 6-301 as an applicable requirement, but requires the use of gas flow meters along with visual inspection and record keeping as monitoring; and Tesoro's permit includes Rules 6-301 and 6-305 as applicable requirements, but does not include any federally enforceable monitoring for these requirements. Please revise the permits to consistently address the applicability and monitoring requirements of Regulation 6.

#6: Flares at the Chevron refinery are subject to the 90% VOC control efficiency requirement pursuant to Rule 8-1-110.3, and several flares at the Shell refinery are subject to the 98.5% hydrocarbon destruction efficiency requirement pursuant to Condition 12271, part 61 (BACT). In the revised SOBs, the District concludes that proper operation of a properly designed (modern, steam-assist) flare provides a strong assurance that a 90% control efficiency of VOCs and a 98% control efficiency of hydrocarbons will be achieved. The District identifies the parameters that

indicate proper operation of a properly designed flare as: flow rate below the design capacity, sufficient (300 BTU/ft^3) fuel value, and continuous presence of a flame.

Because the control efficiency requirements for Chevron and Shell's flares are federally enforceable, all monitoring necessary to determine compliance should be federally enforceable. In the draft March 2004 Chevron and Shell permits, the District included the condition to monitor the flow rate as a federally enforceable requirement, but included the other two parameters of proper flare operation as district-enforceable conditions only. Please add federally enforceable monitoring for the fuel value and the presence of a flame. Please note that section VII of the permits still denotes monitoring for control efficiency as "N/A." Please remove the "N/A" designation and specify that monitoring the flow rate, fuel value, and presence of a flame will determine that the flare is being operated in a manner that will achieve its designed destruction efficiency.

Because the District's evaluation of control efficiency relies on the flares being properly designed (i.e. modern, steam-assist), please include a description of each flare in the SOB addressing these parameters.

#7a: In a letter sent to BAAQMD on October 31, 2003, EPA requested that the District evaluate the applicability of NSPS Subpart J to thermal oxidizers. In Shell's revised SOB, the BAAQMD responded that all combustion devices built after June 11, 1973, are subject to NSPS Subpart J. Despite this, the permits and SOBs are missing NSPS Subpart J applicability determinations for several thermal oxidizers. NSPS Subpart J applicability determinations need to be included in the SOBs for all thermal oxidizers and all applicable requirements need to be included in the permit.

#7b: None of the permits address the applicability of Regulation 6 to the thermal oxidizers. Please address this in the SOBs or add Regulation 6 as an applicable requirement for all thermal oxidizers.

#8: Several thermal oxidizers are subject to federally enforceable control efficiency requirements. We recommend that the District provide a discussion on what type of parametric monitoring will assure compliance with the efficiency requirements, as is done for the flares. The permit for Conoco-Phillips only requires temperature monitoring, while the permits for Shell and Valero contain no parametric monitoring to show compliance with the efficiency requirements. The permits should also require a minimum residence time with flow rate monitoring to ensure complete combustion. In addition to appropriate parametric monitoring, the permits should require annual source tests to ensure that the control efficiencies are being achieved.

Enclosure A - General Comments

Tesoro

Please see the discussion above for a detailed explanation of our position regarding the following comments, including our basis for requesting any changes and a discussion of appropriate monitoring.

1. There is no discussion of the applicability of NSPS Subpart J to Tesoro's thermal oxidizers (A39, A40, and A1402). Please add requirements for NSPS Subpart J to the permit for the above listed thermal oxidizers, or in the SOB, explain why NSPS Subpart J is not applicable.

2. Please add requirements for Rules 6-310, 6-311, and 6-501 for all flares as is done in the Chevron permit.

3. Please include Regulation 6, Particulate Matter and Visible Emissions, as an applicable requirement for thermal oxidizers, or address why Regulation 6 is not applicable to thermal oxidizers.

4. Table IX A-6 shields flares 854, 943, 944, 945, 992, 1012, and 1013 from Rule 8-2 on the basis that these flares are subject to Regulation 10. However, Regulation 10 is not included as an applicable requirement in the permit for flares 943, 944, 945, and 1012. If these flares are subject to Regulation 10, please add this as an applicable requirement to Section IV of the permit for these flares. Otherwise, please remove these flares from Table IX A-6.

5. For flares 854, 992, and 1013, please include federally enforceable monitoring to ensure compliance with the requirements under Section 60.18(c).

6. No monitoring has been included for flare opacity requirements under Regulation 6. Please add federally enforceable monitoring to Section VII as was done for the other permits.

Chevron

Please see the discussion above for a detailed explanation of our position regarding the following comments, including our basis for requesting any changes and a discussion of appropriate monitoring.

1. Chevron's revised SOB indicates that flares 6010, 6012, 6013, 6016, 6017, and 6019 are not subject to NSPS Subpart J, and that flares 6015 and 6039 are subject but exempt from the fuel H_2S limit. These determinations are not reflected in Table IV.A.2.1 of the permit.

This table appears first to indicate that all of the above flares are subject to NSPS Subpart J. Then, further down the table, it appears that only flares 6015 and 6039 are subject and that these flares are subject to the H_2S limit. Directly below, the table indicates that all of the flares other than 6015 and 6039 are subject to NSPS Subpart J, but are exempt from the fuel H_2S limit. Furthermore, only Flare 6039 is covered by the emergency use only provision of Condition 18656. Please clarify in Table IV.A.2.1 which flares are subject to NSPS Subpart J, and which flares are subject to NSPS Subpart J, but exempt from the fuel H_2S limit. For all flares subject to NSPS Subpart J but exempt from the fuel limit, please include a condition in the permit limiting them to emergency/process upset use only. If any of the flares are subject to the fuel H_2S limit, please include continuous monitoring in the corresponding table in Section VII.

2. Please include NSPS Subpart A as an applicable requirement for all flares and thermal oxidizers subject to NSPS Subpart J, regardless of whether the exemption from the fuel H_2S limit applies.

3. Please include Regulation 6, Particulate Matter and Visible Emissions, as an applicable requirement for thermal oxidizers, or address why Regulation 6 is not applicable to thermal oxidizers.

4. For any flares exempt from the fuel H_2S limit please include federally enforceable monitoring in Table VII.A.2.1 to assure compliance with Condition 18656, Part 7 limiting these flares to emergency malfunction/process upset use.

5. Please include federally enforceable monitoring in Section VII of the permit to assure compliance with the requirements of 40 CFR Section 60.18.

6. Flares 6015, 6016, 6017, 6019, and 6039; Compressor 6018; and Relief Drum 6020 all have federally enforceable control efficiency requirements. However, only Condition 18656 (requiring that the permittee record the flow rate) is included as a federally enforceable monitoring requirement for the flares. Please add federally enforceable monitoring for the fuel value and the presence of a flame. It would be clearer if these federally enforceable monitoring conditions replaced the "N/A" determination for monitoring the control efficiency under Rule 8-1-110.3. For the compressor and relief drum, please discuss in the SOB how the District will ensure that the control efficiency requirements are being met.

Valero

Please see the discussion above for a detailed explanation of our position regarding the following comments, including our basis for requesting any changes and a discussion of

appropriate monitoring.

1. It is currently unclear from the SOB and section IV of the permit whether flare 19 is subject to the H_2S fuel limit under NSPS Subpart J, or whether it is exempt based on emergency use only. Please clarify this in the SOB and section IV of the permit. If flare 19 is subject to the H_2S limit, please add appropriate monitoring to section VII of the permit. If flare 19 is exempt from the H_2S limit, please include federally enforceable monitoring to assure compliance with condition 20806, Part 7 limiting flare 19 to emergency malfunction and process upset use only. Please include NSPS Subpart A as an applicable requirement for flare 19, regardless of whether the exemption from the fuel H_2S limit applies. Please also include federally enforceable monitoring to assure compliance with the requirements of Section 60.18.

2. Please provide an NSPS Subpart J applicability determination for thermal oxidizers 14, 15, and 57.

3. Please include Rules 6-305, 6-310, and 6-311 as applicable requirements (with federally enforceable monitoring) for flares 16, 17, 18, and 19.

4. Please include Regulation 6, Particulate Matter and Visible Emissions, as an applicable requirement for thermal oxidizers 14, 15, and 57, or address why Regulation 6 is not applicable to these oxidizers.

5. Thermal oxidizer 57 has a control efficiency requirement pursuant to 40 CFR Part 60, Subpart FF. However, there is no monitoring to assure compliance with this requirement. Please clarify whether the source has met the requirements of 61.349(c), and add the requirements of 61.349(f) for initial and quarterly visual inspections.

9/03 EPA Comment: As noted in our earlier comments on the Valero asphalt plant, please remove the temperature excursion language (p444, section VI, condition 11882) that allows a temperature deviation of any amount for up to fifteen minutes. We understand that the District is concerned about monitor malfunctions. We recommend deleting this excursion language and instead including provisions for the source to note periods of monitor malfunction. We understand that this unit is an enclosed oxidizer and not an open-air flare.

District Response (#185): The suggested change concerns an issue beyond the scope of Title V (i.e., it suggests changes to an applicable requirement, specifically, a District permit) No change has been made to the permit. The District will review the issues raised by the comment, and will take appropriate steps at a later date.

Supplemental EPA Comment:
Condition 11882 contains compliance requirements for NSPS and NESHAP standards. If the District believes that the source need not continuously meet the temperature range, the District must explain how the applicable NSPS and NESHAP standards and other applicable emission

limits allow the source to deviate by any unlimited amount for up to 15 minutes in every hour from the temperature range established to ensure compliance with these standards.

Conoco-Phillips

Please see the discussion above for a detailed explanation of our position regarding the following comments, including our basis for requesting any changes and a discussion of appropriate monitoring.

1. Please include NSPS Subpart A as an applicable requirement for flare 398 and thermal oxidizer 420. NSPS Subpart A applies to all combustion devices subject to NSPS Subpart J, regardless of whether the exemption from the fuel H_2S limit applies. Please also include federally enforceable monitoring to assure compliance with the requirements of Section 60.18.

2. Please include Rules 6-305 and 6-311 as applicable requirements (with federally enforceable monitoring) for flares 398 and 296.

3. Please include Regulation 6, Particulate Matter and Visible Emissions, as an applicable requirement for Thermal Oxidizer 420, or address why Regulation 6 is not applicable.

4. Thermal Oxidizer 420 has a control efficiency requirement pursuant to the federally enforceable Rule 8-44-301.1. However, the only parametric monitoring included in the permit is temperature monitoring. Please add a statement to the SOB discussing how compliance with this control efficiency requirement will be determined. Because the control efficiency of thermal oxidizers depends on both the combustion temperature and the residence time, we recommend adding requirements for monitoring the flow rate to determine residence time. In addition, please include an annual source test requirement.

Shell

Please see the discussion above for a detailed explanation of our position regarding the following comments, including our basis for requesting any changes and a discussion of appropriate monitoring.

1. The permit indicates that Flare 1772 is exempt from the fuel H_2S limit of NSPS Subpart J based on the fact that Flare 1772 only burns process upset and emergency release gases. However, Flare 1772 is not limited to emergency use only by any permit condition. Please add Flare 1772 to Condition 18618, Part 19, and add appropriate monitoring to Section VII.

Enclosure A - General Comments

2. Please provide an NSPS Subpart J applicability determination for Thermal Oxidizers 1518 and 4181.

3. As discussed in the comments provided to BAAQMD on October 31, 2003, EPA believes that the permit shield in Table IX A-4 for Thermal Oxidizers 1501 and 1517, is not appropriate. The shield is in place based on a claim that these thermal oxidizers combust natural gas only. Because these thermal oxidizers incinerate tail gas from the sulfur plant, it is highly unlikely that they are combusting only natural gas. Furthermore, NSPS Subpart J applies to all Claus sulfur recovery plants larger than 20 long tons per day. These oxidizers are a part of the sulfur plant and are therefore subject to NSPS Subpart J. Please remove the permit shield and add the requirements of NSPS Subpart J to the permit.

4. Please include NSPS Subpart A as an applicable requirement for all flares and thermal oxidizers subject to NSPS Subpart J, regardless of whether the exemption from the fuel H_2S limit applies. Please also include federally enforceable monitoring to assure compliance with the requirements of Section 60.18.

5. Please include Rule 6-305 as an applicable requirement for Flare 4201.

6. Please include Regulation 6, Particulate Matter and Visible Emissions, as an applicable requirement for thermal oxidizers, or address why Regulation 6 is not applicable.

7. For any flares exempt from the fuel H_2S limit please include federally enforceable monitoring to assure compliance with Condition 18618, Part 19, limiting these flares to emergency malfunction and process upset use only.

8. Flares 4201 and 1470 have federally enforceable control efficiency requirements, however only Condition 18618, Part 13 (requiring that the source monitor flow rate) is included as a federally enforceable monitoring requirement for the flares. Please add federally enforceable monitoring for the fuel value and the presence of a flame. The monitoring for control efficiency in Section VII of these permits is still marked "N/A." Please show that monitoring will include flow rate, fuel value, and flame monitoring.

9. Thermal Oxidizers 100 and 4181 have control efficiency requirements pursuant to federally enforceable regulations and permit conditions (Rule 8-44-301.1 and BACT, respectively). While A-100 does have a minimum temperature requirement, the permit apparently does not contain any temperature monitoring. Please add a statement to the SOB discussing what parameters will assure compliance with the control efficiencies for A-100 and A-4181, and add appropriate monitoring to the permit. Because the control efficiency of thermal oxidizers depends on both the combustion temperature and the

residence time, we recommend monitoring both the temperature and the flow rate. In addition, please include an annual source test requirement for both thermal oxidizers.

MACT

9/03 EPA Comment: We appreciate the District's commitment to include the MACT hammer in each permit. For instance, the Tesoro evaluation (p8-9) states that 112(j) applies but the units-specific conditions do not include these requirements, such as table IV for loading operations on pp. 55-63. Please identify the units that are subject to 112(j) and list in the Statement of Basis the tables or the page numbers for these requirements.

District Response (#12): The comment merits consideration as a future revision to the permit. However, the District believes the proposed permit conditions are appropriate at least for the time being. The District will consider incorporating the suggestion at a later date. If and when new MACT determinations occur as a result of CAA section 112(j), those requirements will be incorporated on a source-specific basis for each subject source.

Supplemental EPA Comment:
The District has added Subpart GGGGG to the permit for Tesoro. Subparts YYYY and EEEE have been recently promulgated. Please add them to the permit with compliance deadlines.

9/03 EPA Comment: We understand that a condition will be added to each permit requiring timely compliance with future effective MACT standard 40 CFR Part 63 Subpart UUU, for each unit that is subject. The rule applies if the refinery is a major source of HAPs and includes each catalytic cracking unit (CCU) that regenerates catalyst, each catalytic reforming unit that regenerates catalyst, and each sulfur recovery unit (SRU) and the tail gas treatment unit serving it. The compliance date for existing sources depends on when the refinery must meet 30 ppm for gasoline sulfur content but can not be later than 12/31/2009. In some cases, affected sources must comply within 3 years after 4/11/2002.

District Response (#13): The comment merits consideration as a future revision to the permit. However, the District believes the proposed permit conditions are appropriate at least for the time being. The District will consider incorporating the suggestion at a later date.

Supplemental EPA Comment:
The District has revised the Chevron, Conoco-Phillips, Shell, and Tesoro permits to include unit-specific requirements for Subpart UUU. The Valero permit, however, only includes Subpart UUU in the generally applicable requirements Table II-B. We request that the District revise the Valero permit to add Subpart UUU to the applicable requirements tables for the individual affected sources, as was done for the other permits. We also encourage the District to provide the same level of detail that is in the Shell permit for the other four refinery permits (for instance, see Table IV-AP).

Enclosure A - General Comments

PERMIT SHIELDS

Please note that we have moved remaining permit shield comments for the Chevron and Tesoro permits to the relevant individual enclosure for each permit. The permit shield comments for Conoco-Philips and Shell remain in the individual enclosures for those two permits, as they were in our October 30, 2003 letter.

PROCESS VESSEL DEPRESSURIZATION

Please note that this comment replaces the Tesoro comment labeled by the District as #55 and the Chevron condition labeled by the District as #168.

Several of the permits contain the process Vessel Depressurization requirements of Rule 8-10-301 with a recordkeeping requirement (see Chevron Table VII.D.1.1, Conoco Table VII-L, Shell Table VII-AE, Tesoro Table VII-H, for instance). Please include this requirement for each specific unit that is subject to it and specify what recordkeeping the District intends to require that sources use to determine compliance.

SINGLE vs. MULTIPLE SOURCE APPLICABILITY DETERMINATIONS

9/03 EPA Comment: CARB's emission inventory database lists 16 Bay Area sources in the petroleum refining SIC code of 2911 (http://www.arb.ca.gov/emisinv/emsmain/emsmain.htm) and a number of other loading racks under SIC code 5171. We understand that the District will use EPA guidance to determine whether Title V permits are necessary for potential support facilities on a case-by-case basis including the hydrogen plant at the Tesoro refinery (the hydrogen plant is now owned by Air Products) and loading racks that may be support facilities. (comment #17a)

We have now provided you with additional guidance to explain that co-ownership is not always necessary to determine that a facility is a support facility to the primary source. "In short, where more than 50% of the output or services provided by one facility is dedicated to another facility that it supports, then a support facility is presumed to exist."[2] Other factors include the degree of control exerted by the primary source, the nature of contractual agreement, and whether the potential support facility would exist at its current location if not for the primary facility. We request that you evaluate whether Air Products is a support facility for the Tesoro refinery based on the

[2] *EPA Region 5 letter dated August 25, 1999 to William Baumann, Wisconsin Department of Natural Resources at www.epa.gov/Region7/programs/artd/air/nsr/nsrmemos/oscar.pdf, Also see EPA Region VIII letter dated November 12, 1998 to Julie Wrend, Colorado Department of Public Health and Environment at www.epa.gov/Region7/programs/artd/air/title5/t5memos/coorstri.pdf; and EPA Region X letter to Simpson Paper Company dated November 27, 1996 at www.epa.gov/Region7/programs/artd/air/title5/t5memos/simpson.pdf. For more examples, enter "support facility" at www.epa.gov/region07/programs/artd/air/policy/search.htm.*

factors listed in these guidance documents. We request that the District share with us the factors used for that determination. They include Tesoro's dependance on Air Products for hydrogen used in the refinery process, how much of Air Products' raw materials come from Tesoro, and how much of their production serves Tesoro. (comment #18) Please also inform us whether refinery loading racks have their own separate bulk storage, or rely on their host refinery to store the petroleum that they load. (comment #19)

District Response:
#17a & #18: The District committed to performing the analysis of these issues, using EPA guidance as appropriate, and sharing the results with EPA. Of course, since EPA's guidance is not binding on EPA, it follows that it is not binding on the District. A determination that an associated operation is subject to Title V is not necessarily indicative of a deficiency in the permit for the rest of the refinery. Therefore, the District does not interpret this comment as indicating a problem with any of the refinery Title V permits.

#19:
Chevron: Chevron's truck rack receives material from both on site (Plant #72) storage and from refinery tanks (Plant #10). The two facilities share a piping network.

Conoco-Phillips: Product shipping occurs at S-339 (Unit 80).) Essentially all of the product shipped through ConocoPhillips (Plant 15693) originates at the refinery.

Shell: The adjacent Distribution Terminal to the Shell Martinez Refinery is located at 1801 Marina Vista, Martinez. The Plant # is 11956. The SIC Code for the plant is 5171.This Terminal serves to load Gasoline, Jet, and Diesel products to Tanker Trucks. Approx. 20% of the product slate of the Martinez Refinery is loaded to tanker trucks using this terminal. The remainder of the refinery products is shipped via pipeline or ship.

Tesoro: The loading racks at Tesoro rely on storage tanks situated at the Tesoro refinery

Valero: Refinery tanks are used to supply gasoline to loading racks.

Supplemental EPA Comments:
#17a & #18: Based on the information provided by the District, it appears that the hydrogen plant owned by Air Products and Chemicals, Inc. (Air Products) is an integral part of the Tesoro refinery operation. For instance, it appears that the hydrogen plant would not exist without the refinery and the refinery could not produce its products without hydrogen from the hydrogen plant. EPA requests that the District include a compliance schedule requiring the permitting of this source as part of the refinery or require that Air Products expeditiously apply for a separate Title V permit.

In addition, EPA believes the following facilities may be support facilities for the Shell refinery: Shell Chemical LP, located at 10 Mococo Road in Martinez; the Shell Martinez Catalyst Plant, also located at 10 Mococo Road; and the hydrogen plant that is owned by Air Products. EPA requests that the District determine if they are support facilities or if they are part of the refinery, and provide your conclusions and supporting information to us.

#19: Based on the information provided by the District, it appears that the loading racks are part of each refinery and are therefore subject to Title V. Thus, the District should require each

facility to submit permit applications through a compliance schedule in the Title V permit. Please inform EPA of any additional information that would suggest the loading racks do not require a Title V permit under EPA's guidelines.

Enclosure B - Tesoro
April 14, 2004 Update to EPA's September 26, 2003 Comments

ABATEMENT DEVICES (Table IIB)

9/03 EPA Comment: We understand that Tesoro has recently installed a major compressor system at the flare header that will reduce VOC emissions by capturing refinery gases that were once routinely flared. Because many of the flares are prohibited from routine flaring, and because the refinery must also minimize emissions to comply with 40 CFR 60 Subpart A for all units subject to the NSPS (for instance see Table IV - U, page 95 and Table IV - X, page 102), we recommend including the compressor system in Table II-B along with a condition requiring the use of the compressor. Not only would this condition help assure compliance with applicable requirements to capture non-emergency/malfunction releases, it would demonstrate to the public that Tesoro has made improvements to its refinery that will reduce emissions to the surrounding community.

District response (#217): The comment merits consideration as a future revision to the permit. However, the District believes the proposed permit conditions are appropriate at least for the time being. The District will consider incorporating the suggestion at a later date.

EPA Supplemental Comment:
EPA recommends adding the compressors to the permit as the compliance method that the refinery uses to capture non-emergency/malfunction releases to help ensure compliance with NSPS Subpart J.

COMBUSTION UNITS

9/03 EPA Comment:

1. *It appears that an existing firm limit of 775 mmbtu/hr for boiler #6 (S-904) has been increased to 848 mmbtu/hr on page 17 and in part 1 of Condition #16685. We appreciate the District's commitment to explaining the correct rating in the statement of basis and to imposing all applicable BACT/offset/NSPS requirements. (Comment #219)*

[part 2 removed]

3. *The NSPS requirements on pages 879-880 are incorrectly listed as subsumed. We appreciate the District's commitment to removing a proposed permit shield for the NSPS that lists them as subsumed requirements. (Comment #221)*

4. *We understand that a contractor completely re-built boiler #5, which was followed by a greater than 100 tpy NOx increase (OCE 9/17/02 comment p 34). We strongly recommend imposing any applicable requirements that were triggered by this change. (Comment #222)*

District Response:
#219: 775 MMbtu/hr was a mistake, 848 MMbtu/hr is the correct capacity. S-906 was changed to 848 MMbtu/hr in SOB to be consistent.

#221: The comment incorrectly states the District's commitment. The permit has been corrected to reflect the fact that the permit shield is a determination that NSPS is not applicable to the source. The NSPS requirements nave not been subsumed.

#222: The suggested change concerns an issue beyond the scope of Title V (e.g., NSR lookback, etc.) No change has been made to the permit. The District has investigated, and determined that no modification was made to S-903 that resulted in emission increases.

Supplemental EPA Comment:
EPA is concerned that a physical or operational change to boiler #6 may have occurred. Please provide us with the documentation and information that supports the District's position that the change corrects a "mistake" and is not a modification to the unit or the enforceable throughput limits for the unit. (Please note that our response to comment #16 under "Permit Shields" for the NSPS permit shield for this unit also references this EPA Supplemental Comment.)

We understand that the District has expressed disagreement with EPA's request that you determine whether NSR and NSPS emission limits are applicable to boiler #5 in response to comment #222, but has still investigated the information indicating that boiler #5 was re-built. Please provide us with the information and documents that the District used to determine that no NSR and NSPS requirements are applicable to the change in the permitted capacity for boiler #5.

Please note that a heading states S-904 is boiler #6 but conditions refer to S-904 as boiler #5; see p 467.

9/03 EPA Comment: Pages 658-959, Condition #11433 sets limits for NOx (354 tpy), SO2 (1335 tpy), CO & POC, and PM/PM10 (151.5 tpy) for FCCU/CO, boiler #7, and unit S-802/S-901 and requires use of an ESP. Please add these limits to tables IV (pages 104-106) and VII (pages 758-759). (Comment #225) In addition, monitoring for SOx and PM10 must be added to table VII (Condition #11433 refers to a different permit condition that does not appear to contain any monitoring or testing). (Comment #226)

District Response (#225-226): The suggested change corrects a mistake. The mistake has been corrected in the final permit.

EPA Supplemental comment:
EPA recognizes that limits were added to the permit for sources 802 and 901 (the "FCCU/CO Boiler Plant"). However, while Table VII-V states that continuous monitoring is required under Condition 11433 for these pollutants, neither the permit nor Condition 11433 specifically require any monitoring. Please specify the continuous monitoring method in the permit (e.g. whether a specific EPA method(s) will be used to continuously monitor SO_x and other pollutants), or whether some other method will be used.

9/03 EPA Comment: Pages 747 and 749 state that no monitoring is required for the PM and opacity limits for the FCCU (S-802) and coker (S-806) ESPs because their emissions are negligible. However, the District emissions data indicates that unabated 2001 emissions would be several thousand tpy PM from each of the FCCU and coker boilers, and data from the fluid coker boiler manufacturer indicates that this ESP can exceed the grain loading

limit[3]. Therefore, monitoring of the PM and opacity limits for the ESPs must be required and we appreciate the District's commitment to doing so.

Examples of monitoring approved by EPA in the past include (but are not necessarily limited to) parameter monitoring based on specified ranges for the voltage and current, periodic stack tests, and COMs. The proposed Chevron permit requires quarterly source testing of the FCCU and continuous monitoring of the ESP (see pages 431 and 433 of the Chevron permit).

District response #228: The suggested change should be implemented at this time. The change has been made to the permit, based upon the rationale provided in the comment. ESP monitoring has been added to Condition 11433, Part 4a.

Supplemental EPA Comment *(regarding PM and Opacity Monitoring from process units controlled by an Electrostatic Precipitator)***:**

This comment is regarding ESP A11 and ESP A806. Because of the complex configuration, we would like to note our understanding that ESP A11 controls the S901-FCCU #7 boilerhouse, which is also described in the permit as "S-802 AND S-901, THE FCCU/CO BOILER PLANT" because the FCCU vents to boiler #7 and boiler #7 is ducted to the ESP. We also understand that ESP A-806 controls coker S-806, which is also described as "Coker/No. 5 CO Boiler (S-806/S-903)" because the coker emissions are routed to S-903 and the S-903 exhaust is ducted to the ESP . According to permit condition # 18372, "The No. 6 Boiler (S904) serves as the emergency backup to No. 5 Boiler (S903)."

Table II B states that operating parameters will be established for ESPs (p27-28, p30 and p32) A11 and A806, effective June 1, 2004. We agree with the establishment of operating parameters such as voltage for the ESPs and understand that establishing these parameters will require valid data. We recommend changing the other sections of the permit based on these operating parameters, and ensuring that periodic particulate source testing is performed for each unit, unless the District provides a specific justification for not requiring periodic testing.

Some sections of the permit are unclear whether testing and/or monitoring is required for particulate limits. There is no listed monitoring for fine particulates for S901-FCCU #7 boilerhouse, Table VII - V, on p. 539. Table VII-V, p. 538 states that continuous monitoring is required under Condition 11433, but neither the permit nor Condition 11433 specifically require any monitoring for any pollutants (as noted in an earlier comment). In addition, Condition 11433 does not appear to apply to coker S-806. Also, the SOB does not include a justification of COMs as periodic monitoring for particulates for units S-802/S-901 and S-806/S-903, or S-904

[3] *The ESP construction company states that the ESP is designed to handle a fluid coker output of up to 0.5 gr/ACFM (http://www.southernenvironmental.com/casedtls.cfm?id=27). We assume that the outlet temperature would be far less than 1500 + degrees K, and thus the ESP is intended to treat inlet loadings well above the District standard of 0.15 gr/dscf.*

(which is a back-up for S-903). For boiler unit S-903 (p. 35 of the 12-1-2003 permit), the SOB states that "No monitoring is proposed because emissions are expected to be negligible," which appears incorrect because it burns exhaust gas from the coker. The SOB needs to determine and justify adequate monitoring in the permit for all of these units.

9/03 EPA Comment: We appreciate the District's commitment to performing an evaluation of the periodic monitoring required for several sources without ESPs (e.g., FCCU #7, coke loading at unit #10 and handling operations [see page 744]), and to requiring periodic monitoring of those sources unless the District demonstrates that the facility could not exceed the emission rates. For instance, the engineering evaluation states that emissions are negligible because the coke is handled as a slurry; however EPA understands that the emissions from some sources such as the coke loading (unit #810) may have significant potential emissions. (Comments #229-#231)

District response (#229-#231): The suggested change should be implemented at this time. The change has been made to the permit, based upon the rationale provided in the comment. Daily visual opacity check has been added.

Supplemental EPA Comment:
We suggest including an evaluation in the statement of basis on whether any particulate source testing is appropriate for these units, as opacity monitoring is beneficial but the correlation of opacity monitoring to particulate emissions is not clear.

9/03 EPA Comments: Pages 781-783 of the draft permit list source testing every other year for 300-880 bhp engines without describing what compliance method will be used to meet the limit (see equipment list, pages 22-23). In addition, the permit must contain adequate monitoring (such as parameter monitoring and/or use of calibrated portable analyzers) to determine emissions between tests. Also note that VOC testing may be necessary to demonstrate compliance with the emission cap for rich-burn engines 952-954. (Comment #234). [Table IV for IC engines is on pages 126-129. Identifying each as rich or lean burn engines in the table would be helpful (Comment #235).

The SJVUAPCD Occidental permit contains examples of quarterly self-testing for engines in the size range of 800-1000 bhp. For 300 bhp engines, the SJV policy (available at http://www.valleyair.org/policies_per/Policies/SSP%201810.pdf*) contains examples of appropriate monitoring.*

District Responses:
#232 and #233: The suggested change should be implemented at this time. The change has been made to the permit, based upon the rationale provided in the comment. The frequency of source testing has been changed from biannual to semiannual.

#234: *The contribution that VOC emissions from these engines make to the VOC cap is trivial, and does not justify imposition of a monitoring requirement.*

#235: *Rich Burn engines are S-952, S-953, S-954. The rest are Lean-Burn engines.*

Supplemental EPA Comment:
The permit does not contain testing for VOCs at rich-burn engines 952-954; therefore, the District should add periodic monitoring for these VOC emissions. We also suggest identifying in

the permit or at least in the Statement of Basis, that these engines are rich-burn and explaining whether the engines (both lean- and rich-burn) have NOx controls that need to be checked between source tests.

New EPA Comment:
The District has proposed to delete all compliance requirements for the federally-enforceable NOx limits for at least sixteen combustion units (Tables VII-Y p.543 and Table-AA p.547) while marking the source testing requirements for Regulation 9-10 not federally enforceable. The Statement of Basis (p.21) does not contain any new periodic monitoring evaluation or other basis for deleting monitoring for these units as a federally enforceable requirement. Please retain the NOx compliance requirements as federally-enforceable requirements.

COOLING TOWERS

9/03 EPA Comment: The emissions calculations provided by the District show that under the expected operating conditions, the estimated POC emissions from the cooling towers are significantly less than the 300 ppm limit specified in Section 8-2-301. As a result, periodic monitoring is not required for these sources to demonstrate compliance with the aforementioned limit. At the same time, however, the estimated emissions are not low enough to reach the same conclusion regarding the requirements of 40 CFR 63 Subpart CC, which have an applicability threshold of 20 ppmv organic HAP. In the absence of source-specific emissions or monitoring data, the District should, at a minimum, determine which of the cooling towers are vulnerable to HAP emissions and require periodic monitoring of the identified sources to confirm that the emissions remain below the 20 ppmv threshold.

District Response (#238): See response number 178

District Response to Number 178: [left blank]

Supplemental EPA Comment:
The calculations for the cooling towers do not reliably demonstrate the non-applicability of 40 CFR Part 63, Subpart CC. EPA recommends that the District first improve the calculations for all of the refineries as outlined in the supplemental comment to #107 (see Enclosure C). If the revised calculations do not yield results below 20 ppmv with a reasonable margin of safety, the cooling towers should be considered miscellaneous process vents under Subpart CC unless the refinery can measure that the emissions are below 20 ppmv. For the cooling towers with revised calculated emissions sufficiently below 20 ppmv, the District should require periodic monitoring of the parameters used to make the calculations to verify that the emissions remain below the threshold.

9/03 EPA Comment: The District noted that the applicable concentration limits have not been inserted into Parts D5, D5A, E5, and E5A of Condition #19199. The appropriate limits will be included in the permit once they are established by the District.

District Response (#244): The comment merits consideration as a future revision to the permit. However, the District believes the proposed permit conditions are appropriate at least for the time being. The District will consider incorporating the suggestion at a later date. The permit will be amended to include the limits once the appropriate values have been established.

Supplemental EPA Comment:
Please indicate whether or not the limits have been established and when the District intends to incorporate them into the permit.

New EPA Comments:
1. Condition #18435 requires that the S-975 water circulation flow rate be measured by a third party on a monthly basis beginning June 1, 2004. This requirement was omitted from Table VII-Ta.

2. Conditions #19199.D6 and E6 require that S-975 and S-982 be sampled twice per week from the cooling water return line and once per month at the basin. After 26 weeks of sampling, these requirements decrease to sampling the cooling water return lines once each week. Tables VII-Ta and -Tb only list the weekly sampling requirements and should be revised to reflect the more frequent monitoring required for the first 26 weeks.

EMISSION CAPS

9/03 EPA Comment: Unclear applicability
The proposed permit contains two emission caps for five criteria pollutants on pages 599 and 631. In is not clear which cap applies or whether both apply. Please specify in the permit which equipment is subject to the cap and list any other tables that are relevant to the caps. Also please clarify whether both caps apply, or whether one cap is a modified version that superceded the prior one. Please make all cap reductions required by condition 9.11 and delete references to units that are listed under the monitoring requirements but that are no longer are permitted (see page 602, S-911 and S-918).

District Response (#20-23): The District will review the history and both caps apply for now; the District will consider adjustment later; and the District deleted units that are no longer permitted.

EPA Supplemental Comment:
EPA appreciates the clarification that both caps currently apply. Please include the adjusted emission cap levels in the proposed permit submitted to EPA.

9/03 EPA Comment: We appreciate the District's commitment to deleting provisions allowing CO increases based on modeling (for example, see page 609-610). The appropriate requirements for approving an increase are specified in the District's SIP approved NSR rule and 40 CFR.

District response (#26): The condition text has been amended in condition #4357 and #8077 to clarify that CO

increases must comply with the SIP adopted version of Regulation 2, Rule 2 and applicable provisions of the federal Code of Regulations.

EPA Supplemental Comment:
While we appreciate the District's agreement to correct this condition, we recommend deleting the condition as it currently stands to avoid confusion over whether the APCO has authority to approve emission increases subject to PSD, and whether BACT and other PSD requirements would apply to CO increases:

> Current permit language: "If Permittee/Owner/Operator can demonstrate by modeling to the satisfaction of the Air Pollution Control Officer, consistent with the requirements of the SIP adopted version of Regulation 2, Rule 2 and applicable provisions of the federal Code of Regulations, that increased emissions of carbon monoxide from all emission points covered by this permit will not interfere with the attainment or maintenance of all applicable air quality standards for CO within the District, then the various limits for carbon monoxide set forth in Section 2 of this permit shall be adjusted accordingly."

9/03 EPA Comments:

1. *The permit must explain how compliance with the cap will be determined. Cap condition #4 contains some CEMS requirements for NOx (page 602) and many sources will be required to monitor NOx and CO to meet other requirements (BAAQMD Policy Memorandum: NOx, CO, and O2 Monitoring Compliance with Regulation 9, Rule 10). The cap does not address the use of these CEMs for compliance and does not contain a method for determining emissions from other units. We appreciate the District's commitment to adding the compliance monitoring method to the permit, and we strongly recommend clarifying that CEMs data must be used for all units that are required by the District to have them. (Comment #28/29) In addition, we recommend listing CEMs as federally enforceable where they are required in the permit[4]. (Comment #30)*

2. *The cap must also explain how compliance with other limits will be established. The permit contains H_2S monitoring for several units and it would be helpful if the permit required the facility to convert the H_2S content to equivalent SO2 emissions for cap compliance purposes.(comment #31) The permit requires SO2 monitoring or daily source testing at sulfur recovery units (pages 606-607), and Tesoro must "calculate the emission of SO2 from all flares at the refinery." Therefore, it appears that H_2S content monitoring of flared gases is required to assure compliance with the cap. (comment #32)*

3. *Please revise the cap to state that the CEMs are required for sources such as the FCCU (S-802 page 746), coker (S-806 p.749), boiler #6 (S-904 - this unit is apparently subject to SOx CEMs on table IV due to burning coker gas), claus 3-stage sulfur recovery unit (S-1401 page 789), and the sulfuric acid manufacturing plant. Please also add CEMs or another accurate method of quantifying SO2 emissions from any other units with SO2 emissions from refinery feed stock (i.e., not just from combustion of refinery fuel gas that is already continuously monitored.) Similarly, the permit must contain a compliance method for the PM and VOC limits, and the emission rates for units subject to the cap must be verified by compliance testing where feasible.*

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[4] *Please re-label CEM requirement for boiler #5 on p121 as fed/enf (for furnaces on p.113; p125 also). CEMs are already mandatory under 1-520 for boilers #5 and any similar units because they are >250 bbmtu/hr and may burn non-gaseous fuels.*

(Comments #33-39)

4. *Pages 615-616 (parts 11 and 12) allow discretion to allow "partial credit" for control at the discretion of the APCO. If the source wishes to use other data not previously approved for partial-control situations, please add source testing requirements to the permit. #40*

District Response: The District agreed to change #28. The District stated that CEMs required by the permit are federally enforceable (#30). The District promised to include the change requested in comment #32 in Revision #1 to the permit. The District responded to 29 and 31 that the Appendix has been added to the Statement of Basis and responded to 33-37 and 39 that no information is needed because the Appendix is now attached to the permit. The District also agreed to evaluate whether additional SO2 monitoring is necessary for non-combustion sources to determine compliance with the cap in response to comment #38. The District agreed to add emission monitoring or source testing requirements for sources that want credit for partial control of emissions in response to comment #40.

Supplemental EPA Comments:
The permit is still unclear as to how flare emissions and other SO_x emissions will be determined for cap compliance purposes. The changes requested in comments 29, 31, 33 - 37, and 39 have not been added to the permit so we are unable to judge whether they would correct the permit.

Any new emission rates for partially controlled emissions (i.e. for VOCs) should be accomplished by a permit revision, or an EPA and District approved specific test method that is included in the permit. The permit does not specify what methods will be used to determine these alternative rates. It states, "If Permittee/Owner/Operator can demonstrate that emissions were partially controlled, to the satisfaction of the APCO, based on District approved emissions monitoring, emissions less than uncontrolled may be used" and "If Permittee/Owner/Operator can demonstrate that emissions were partially controlled to the satisfaction of the APCO, based on District approved source testing, emissions less than uncontrolled may be used" (page 381). Alternatively, if partial control is no longer an option under the latest District prohibitory rules, please delete this option from the permit.

FLARES and THERMAL OXIDIZERS

Because of the extent of the changes made to flare conditions in the refinery permits, EPA has reevaluated the permits with respect to flares and thermal oxidizers. Because of the complete rewriting of flare issues in the permits and EPA's reevaluation, we have removed our previous comments from the enclosures, and have addressed any outstanding issues from our original comments, as well as any issues regarding the District's revised flare conditions, in Enclosure A – General Comments.

Enclosure B - Tesoro

FUGITIVE SOURCES

9/03 EPA Comments: The permit does not address section 60.486(c)-(h) (recordkeeping and reporting requirements under 40 CFR Part 60 Subpart VV). The following applicable requirements should be included in the Title V permit:

[parts a, d, and f, removed]

b. *60.486(d) - The following information pertaining to the design requirements for closed vent systems and control devices shall be recorded and kept in a readily accessible location: (1) Detailed schematics, design specifications, and piping and instrumentation diagrams. (2) The dates and descriptions of any changes in the design specifications. (3) A description of the parameter or parameters monitored to ensure that control devices are operated and maintained in conformance with their design and an explanation of why that parameter (or parameters) was selected for the monitoring. (4) Periods when the closed vent systems and control devices are not operated as designed, including periods when a flare pilot light does not have a flame. (5) Dates of startups and shutdowns of the closed vent systems and control devices. (Comment #49)*

c. *60.482-10(e) - … (Comment #50)*

e. *60.482-10(g) - … (Comment #52)*

District Responses (#49, #50, & #52): The suggested change should be implemented at this time. The change has been made to the permit, based upon the rationale provided in the comment.

Supplemental EPA Comment:
Although the District's response indicates that the requested requirements were added to the permit, they are missing from the current draft; please ensure that the requirements of 60.486(d), 60.482-10(e), and 60.482-10(g) are added to Table IV-DA.

9/03 EPA Comment: Please explain why 40 CFR part 61, subpart FF is not included as an applicable requirement. If this standard is an applicable requirement please see the Chevron comments on this subpart (applicable requirements and monitoring).
District Response (#54): The suggested change should be implemented at this time. The change has been made to the permit, based upon the rationale provided in the comment.

Supplemental EPA Comment:
Table IV-A for facility #B2758 has references to 40 CFR 61.343 through 61.357(f), which contain standards and recordkeeping requirements for various process units. However, many of these requirements are not included in the source-specific tables for each of the affected units. For example, Section 61.343 contains standards for tanks. The requirements of 61.343 should be included in the tables for each tank that is subject to 61.343. The same is true for the remainder of the requirements noted above. Please revise the permit accordingly. Please also add monitoring for these sections as needed.

9/03 EPA Comment:
1. *BAAQMD Rule 8-18: Table VII-I (pages 862-868) indicates that no monitoring is required for several Rule 8-*

18 requirements. EPA recommends adding citations to Rule 8-18 leak inspection requirements or adding 8-18 monitoring requirements to the permit. Among these please add:

a. 8-18-306.1: P/E record-keeping to the monitoring requirements for this rule.

b. 8-18-306.2: record-keeping to the monitoring requirements for this rule.

c. 8-18-307: inspection and record-keeping to the monitoring requirements for this rule.

District Response (#56): The suggested change should be implemented at this time. The change has been made to the permit, based upon the rationale provided in the comment.

Supplemental EPA Comment:
These changes have not been fully implemented. There is still no monitoring for 8-18-306.1 and 8-18-307. A recordkeeping requirement for 8-18-306.2 is still missing.

9/03 EPA Comment: [With regard to 60.692-5(b)] Table VII-I (pages 862-868) indicates that no monitoring is required for control devices used to meet the 95% control limits or for certain temperature and residence time requirements, which may be an alternate operating scenario. The permit must contain monitoring requirements and conditions for existing controls and for alternate operating standards (including notification, etc) for these controls if the facility wishes to have the option of using them to comply with the standard.

District Response (#57): The suggested change should be implemented at this time. The change has been made to the permit, based upon the rationale provided in the comment. This is now Table VII-CF. 60.695 monitoring will be added.

Supplemental EPA Comment:
The District has added "CEMS" to the monitoring column in Table VII-I. Please specify what parameter will be continuously monitored, noting that if a thermal oxidizer is the control device being used, the District must add continuous temperature monitoring pursuant to Section 60.695(a)(1). Please also clarify whether the source will be using the 95% control efficiency compliance option or the minimum temperature and residency time option. If the facility wishes to have the option for both, please add an alternate operating scenario with adequate monitoring to the permit for each option. The District should also identify which closed vent systems and control devices are being used to comply with this subpart.

9/03 EPA Comment: [Regarding the requirements of CFR 40 Part 60, Subpart VV and Part 61, Subpart V] please see Chevron comments.

Chevron Comments (repeated here for convenience):
1. *60.482-9(d): Add P/E recordkeeping and reporting.*
2. *60.482-7(b) and 61.242-7(b): Add a recordkeeping requirement.*
3. *[removed]*
4. *60.482-10 (b) and 61.242-11(b): Include a monitoring method to determine compliance with the 95%*

control efficiency requirement.

5. *60.482-10 (c) and 61.242-11(c): If the limit used is 95% efficiency, please see the comment above. If the limit used is residence time and temperature, please add continuous gas flow meters and temperature monitor. Please also add these requirements to all equipment subject to this rule.*
6. *60.482-10(g) and 61.242-11(f): Add recordkeeping.*
7. *60.482-4(b) and 6.242-4(b): Add recordkeeping.*
8. *60.482-8(a) and 61.242-8(a): Add recordkeeping.*
9. *60.483 and 61.243: Add to monitoring "Notify Administrator of election to comply with 60.483 or 61.243," and recordkeeping of percent of valves found leaking during each leak detection period.*
10. *61.242-2(g): The limit given is for 61.242-2(h). If the district meant (h) please change monitoring citation to reflect this. If the district meant (g) change monitoring type to measure leaks; visible, auditory, and olfactory inspection; and recordkeeping and reporting.*
11. *61.242-10(d): Add recordkeeping requirement.*
12. *[removed]*
13. *61.242-4: Add "measure for leaks" (Periodic) to monitoring column.*

District Response (#58): The comments do not appear to apply to Tesoro. No change was made to the permit.

Supplemental EPA Comments:
All of the items listed above do apply to the Tesoro permit and should be addressed. Additional clarifying remarks are provided below for some of the items.

4. Please add 60.482-10(b) to section IV of the permit as an applicable requirement, and to section VII with appropriate monitoring. Section 61.242-11(b) is included in Section VII, but with no monitoring; please add monitoring. See the discussion in the Chevron attachment for additional background information on these comments.

5. Please add 60.482-10(c) to section IV of the permit as an applicable requirement, and to section VII with appropriate monitoring. Section 61.242-11(c) is included in Section VII, but with no monitoring; please add monitoring. See the discussion in the Chevron attachment for additional background information on these comments.

6. Please add 60.482-10(g) to section IV of the permit as an applicable requirement, and to section VII with a recordkeeping requirement. Please add recordkeeping to the monitoring column of Section VII for 61.242-11(c).

8. Add 60.482-8(a) to section VII with a recordkeeping requirement. Add recordkeeping to section VII for 61.242-8(a).

9. Also add monitoring for leaks to section VII.

Enclosure B - Tesoro

PERMIT SHIELDS

9/03 EPA Comment: [Please note that this comment was originally included in the General Comments section of our September 26, 2003 comment letter] Another example is the NSPS permit shield proposed for the Tesoro permit. Boiler #6 apparently may have been modified to increase capacity (see detailed comments on the Tesoro permit), so please delete this permit shield for boiler #6. We also recommend that the permit explicitly state that the facility shall not modify nor reconstruct (as defined in 40 CFR part 60) any unit shielded from the NSPS.

District response (#16): The firing rate of the No. 6 Boiler, S-904, has not been modified. The firing rate was changed from 775 MM Btu/hour to 848 MM Btu/hour to show the boiler's design heat input rate. An application (#19418) was submitted to the District in January 1999 to retrofit the boiler with a Selective Catalytic Reduction (SCR) system to comply with the facility-wide NOx averaging requirement of Regulation 9-10-302. A condition was imposed at that time to limit the maximum firing rate to design heat input rate of 848 MM Btu/hour (Condition # 17322, Part 1). Therefore, the permit shield for No. 6 Boiler is appropriate since it has not been modified since its inception in 1956. Appropriate language has been added to the preamble of the Permit Shield to stipulate that the shields for the affected sources are only valid as long as the conditions for the shields are met.

Supplemental EPA Comment:
As we noted in our response to District response to comment #219 regarding whether changes at the boiler triggered NSPS (and/or other applicable requirements), EPA is concerned that a physical or operational change to boiler #6 may have occurred. As requested in that section of this enclosure, please provide us with the documentation and information that supports the District's position that the change corrects a "mistake" and is not a modification to the unit or the enforceable throughput limits for the unit.

New EPA Comment:
Please add additional detail to the Tesoro permit shields in section IX-A1 through A-4 (pp. 634 - 5). They state that the units are not "newly constructed, reconstructed or modified." Instead, please state that the units are not constructed, reconstructed, or modified since the applicability date of the requirement (e.g., October 4, 1976 for NSPS Subpart J) if you are granting a shield for this reason.

SULFUR TREATMENT EMISSIONS

9/03 EPA Comment: We appreciate the District's commitment to adding testing for sources 1401, 1404, 1405, and 1411, for opacity and PM requirements (see Table VII A, pages 798-792).

District Response (#61): The suggested change should be implemented at this time. The change has been made to the permit, based upon the rationale provided in the comment. This monitoring will be added in a new condition. S-1405 is already in 19528-15.

EPA Supplemental Comment:
Table VII - AK for S-1401, for instance, does not require any PM testing and it is unclear how opacity monitoring would correlate with opacity emissions, or whether the District considered other factors in deciding to not require PM testing. The Statement of Basis appears to omit

discussion of PM emissions. Please add a periodic monitoring evaluation for PM emissions.

9/03 EPA Comment (Monitoring for 95% H_2S monitoring requirement, SIP Rule 9-1-313): We appreciate the District's commitment to adding annual source testing process monitoring. We also recommend monitoring to verify that the unit is operating properly.

District Response (#62): The suggested change should be implemented at this time. The change has been made to the permit, based upon the rationale provided in the comment.

Supplemental EPA Comments:
The District generally added testing for SRUs (Table VII - AK for instance for S1401 p.561 requires an annual test per condition 21053 and Chevron has this also Table VII.E.1.1 for S-4345, S-4433, S-4434, S-4435 on p439) Please also add monitoring for 9-1-313 for S-802 in Table VII-K. Also, the District should add monitoring for unit S-802. In addition, the effective date for particulate testing is June 1, 2004. We understand from discussions with the District that this date would allow the source to wait until June 1, 2005 to test for the first time. We request that the District delete this date and instead require that the source perform an initial test within one year of the original permit (i.e. by 12/1/03).

In addition, the District did not add parameter monitoring to verify that the units are operating properly between source tests. If the District believes that a SOx CEMs (for instance, see Table VII.E.2.1 p. 440) could indicate compliance or non-compliance between source tests, we recommend stating this in the Statement of Basis. Alternatively, the District should explain how the permit will assure compliance between sources tests.

9/03 EPA Comment: Please provide a monitoring evaluation for any controls necessary to meet this limit (see engineering evaluation, page 31).

District Response (#63): The suggested change should be implemented at this time. The change has been made to the permit, based upon the rationale provided in the comment. This monitoring is in Condition 19528 part 9.

Supplemental EPA Comments:
The condition now says: "For S-1401, Permittee/Owner/Operator shall ensure that not less frequently than once each calendar year a District approved source test is conducted for S-1401 measuring its SO_3 and H_2S0_4 emission rate per dry standard foot of exhaust volume, expressed as 100% H_2S0_4. This monitoring requirement shall become effective April 1, 2004." (The permit also requires SO_x CEMs)

As with the prior comment, the District did add testing but not add parameter monitoring to verify that the units are operating properly between source tests. If the District believes that a SOx CEMs (for instance, see Table VII.E.2.1 p. 440) could indicate compliance or non-compliance between source tests, we recommend stating this in the Statement of Basis. Alternatively, the District should explain how the permit will assure compliance between sources tests.

9/03 EPA Comment: Please specify the compliance date and the monitoring method for the 4 lb SOx/ton sulfur limit that is effective 4 years after an ATC is issued (page 638 condition (B)(9)).

District Response (#64): The mistake was corrected.

EPA Supplemental Comment:
Condition 8077-B9 still references the date of an ATC that we understand was issued a long time ago. We suggest deleting the entire section suggesting that the requirement may have a future effective date, since the effective date has already passed.

TANKS

9/03 EPA Comment: To demonstrate compliance with the requirements of Section 8-5-328.1.2 [for external floating roof tanks], the permit requires monitoring on an unspecified frequency or on an event basis; however Section 8-5-502 establishes an annual source testing requirement. In addition to changing the required monitoring frequency, the District should add Section 8-5-502 as a monitoring requirement citation. (Also please see comment 7 for additional statements regarding this monitoring requirement.)

District Response (#72): The argument supporting a suggested change is incorrect as a matter of law. No change has been made to the permit. The annual source test requirement of Regulation 8-5-502 applies to tanks degassed to an approved abatement device. This does not apply to external floating roof tanks.

Supplemental EPA Comment:
EPA agrees with the District's application of Regulations 8-5-328.1.2 and 8-5-502 in the draft Chevron and Shell permits. In these permits, all tanks (including those with external floating roofs) that are subject to the requirements of Regulation 8-5 are subject to 90% control efficiency and annual source testing requirements. As an example, please refer to Table VII.F.1.5 in the 3/04 draft Chevron permit. EPA agrees with requiring monitoring on an event basis to demonstrate compliance with the 10,000 ppm limit but the 90% control efficiency and annual source testing requirements should also be in the permit. The District should revise the Tesoro permit so that it contains the requirements of Regulations 8-5-328.1.2 and 8-5-502 in a manner consistent with the March 1, 2004 draft Chevron permit.

9/03 EPA Comment: [For external floating roof tanks] the inspection requirements for pressure vacuum valves were omitted from the permit. Pursuant to Section 8-5-403, tanks subject to the requirements of Section 8-5-303 must be inspected for compliance twice per calendar year at 4 to 8 month intervals.

District Response (#73): The argument supporting a suggested change is incorrect as a matter of law. No change has been made to the permit. External floating roof tanks do not have vacuum pressure relief devices.

Supplemental EPA Comment:
Please remove BAAQMD 8-5-303 from the tables for external floating roof tanks in Section IV if it does not apply.

9/03 EPA Comment: Several tanks and tank clusters are exempt from the requirements of Regulation 8-5. However, no monitoring is required for them pursuant to that rule. For the tanks that claim exemption based on low vapor pressure, the permit should require monitoring whenever the tank contents are changed. (#78) For examples of tanks exempt from Reg. 8-5 without monitoring, refer to the monitoring requirements for Cluster 01a (pp 797-799) and Cluster 01b (pp 800-805). From the permit, the basis for the exemption is unclear; in all such cases, the District should review the basis and apply the monitoring requirement where appropriate. (#79)

District Responses (#78 & #79): The suggested change corrects a mistake. The mistake has been corrected in the final permit.

Supplemental EPA Comment:
EPA agrees with the addition of Condition 15928.12, which requires the Permittee to determine the vapor pressure of the tank contents any time they are changed. According to the permit, this determination may be made using Lab Method 28 from Volume III of the District's Manual of Procedures or Table 1 in Reg 8-5. For tanks containing materials that are not in Table 1, the permit should require that the Permittee conduct initial vapor pressure determinations and maintain records of the results.

9/03 EPA Comment: The frequency specified for many tank monitoring requirements in all of the permits is "not specified." In cases where the monitoring frequencies are not specified in the applicable requirements, the District should establish appropriate ones.

District Response (#80): The suggested change corrects a mistake. The mistake has been corrected in the final permit.

Supplemental EPA Comment:
The permit was corrected in some cases but it still contains several instances where the frequency is not specified for monitoring requirements associated with the control device standards of 8-5-306. EPA recommends that source testing be required on an annual basis in addition to any other monitoring that is necessary to assure compliance. Tables to be revised include the following:

- VII-BE Cluster 05
- VII-BI Cluster 13
- VII-BS Cluster 25
- VII-BT Cluster 25
- VII-BU Cluster 25
- VII-CA Cluster 28
- VII-CB Cluster 28
- VII-CC Cluster 28
- VII-CD Cluster 28
- VII-CE Cluster 28

For sources that are subject to the deck fitting closure standards under 60.112a(a)(1)(iii) and (iv), Section VII of the permit either does not specify the monitoring frequency or type. Where necessary, the District should revise the permit so that visual inspection is required on an event basis. Tables to be revised include the following:

- VII-BJ Cluster 20
- VII-BK Cluster 20

9/03 EPA Comment: We understand that the District will add the basis for exempt tanks Tesoro pp 37-40 to the permits and we agree with this revision.

District Response (#90): The comment merits consideration as a future revision to the permit. However, the District believes the proposed permit conditions are appropriate at least for the time being. The District will consider incorporating the suggestion at a later date.

Supplemental EPA Comment:
Please revise the Tesoro permits to state why the tanks and other sources in tables II-D (Tesoro) are exempt. Similar tables in the permits for Chevron, Conoco Phillips, and Shell contain the requested information.

New EPA Comments:

1. For the sources that are subject to NSPS Subpart Kb and vented to a control device, 60.112b(a)(3)(ii) allows the use of a flare or another control device designed and operated to reduce inlet VOC emissions by 95% or greater. Depending on which type of control device is used, the monitoring requirements under 60.113b vary. Under these circumstances, the permit should specify exactly which requirements apply to each of the sources based on the actual control device that is being used; this is not the case for three tables in Section VII of the permit. For example, Table VII - BS contains the following entry:

VOC	60.112b (a)(3)(ii)	Y		Control device standards; includes 95% efficiency requirement, or a flare per 60.18	60.113b (c)(2) & (d)	P/Every other year	specified parameter

60.113b(d) applies to flares and 60.113b(c)(2) applies to all control devices other than flares. In this case, one or the other should be specified. In addition, rather than saying, "specified parameter" for the monitoring type, the permit should be clear about which parameters must be monitored. This is especially true for control devices other than flares where the parameters are part of an approved plan under 60.113b(c)(1). Because the approved plans may require monitoring of more than one parameter, the single monitoring frequency that is specified in the permit may not be appropriate for all parameters and may not be consistent with all plans. If the District does not want to expand on the requirements in Section VII of the permit, the tables should reference the appropriate plan and the District should include all of the plans as attachments to the permit. In addition to VII - BS, the District should revise the following tables:

- VII - BT
- VII - BU
- IV - CG
- IV - CH
- IV - CI

2. For sources that are subject to the requirements of 63.119 and 63.646, and that are vented to a control device, the regulations allow a range of options with respect to the control device that is used, the control efficiencies that are required, and the monitoring that is required. As previously noted in the context of NSPS Subpart Kb, the permit should be specific with respect to each of these requirements. For example, Table VII - CA contains the following entry:

HAP	63.646(a) 63.119 (e)(1) & (2)	Y		Control device standards; includes 95% efficiency requirement (or 90% if older than 7/15/94), or a flare per 63.11(b)	63.646(a) 63.120 (d)(5), (e)(4)	as approved	specified parameter

For the description of the monitoring requirement, the permit should specify which control device or control efficiency is required. Also, rather than the non-specific information for the monitoring frequency and type, the permit should be clear about what frequency is approved and what parameters must be monitored. In addition to VII - CA, the District should revise the following tables:

- VII - CB
- VII - CC
- VII - CD
- VII - CE
- IV - CV
- IV - CW
- IV - CX
- IV - CY

WASTEWATER TREATMENT

9/03 EPA Comment: Please verify whether the facility has slop oil vessels. If so, rules 8-8-305, 8-8-305.1 and 8-8-305.2 apply. Also note that 40 CFR Part 60, Subpart QQQ 60.692(d)-(e) applies to slop oil vessels. (comment 94) Please verify whether sludge dewatering occurs at the facility. If so, rule 8-8-304 may apply. (Comment 95)

District Response (#94 & 95): The comment merits consideration as a future revision to the permit. However, the District believes the proposed permit conditions are appropriate at least for the time being. The District will consider incorporating the suggestion at a later date.

Supplemental EPA Comment:
If the facility has slop oil vessels or if sludge dewatering occurs at the facility, please revise the permit so that it assures compliance with all applicable requirements.

9/03 EPA Comment: Please verify whether the wastewater treatment system falls under Group 1 or Group 2 for refinery MACT standards (40 CFR Part 63 Subpart CC). This must be clear in the permit to determine what requirements apply to the wastewater treatment system. We understand the District will clarify whether the wastewater treatment system falls under Group 1 or Group 2 for the purposes of 40 CFR Part 63 Subpart CC.

District Response (#96): The refinery has verified that they do have Group 1 wastewater streams. Therefore, some wastewater streams are subject to 40 CFR 63, Subpart CC. 40 CFR 63.640(o) states that Group 1 wastewater streams that are subject to 40 CFR 60, Subpart QQQ are only required to comply with 40 CFR 63, Subpart CC. 40 CFR 63.647 states that Group 1 sources shall comply with the requirements of 40 CFR 61, Subpart FF, sections 340 through 355. The 40 CFR 61, Subpart FF requirements have been inserted in the "Facility" table of the permit at the section level. More detail will be added in the first or second revisions of the permit.

Supplemental EPA Comment:
Please add 40 CFR 63.641 to Table IV-A.

9/03 EPA Comment: Please verify whether the wastewater treatment system falls under Group 1 or Group 2 for [40 CFR Part 61] Subpart FF (Subpart CC for WWTPs at refineries require refinery to comply with 61.340-61.355 standards under NESHAP part 61 subpart FF and 63.647 under part CC for group 1 sources). This must be clear in the permit to determine what requirements apply to the wastewater treatment system. We understand the District will clarify whether the wastewater treatment system falls under Group 1 or Group 2 for the purposes of 40 CFR Part 63 Subpart FF.

District Response (#97): The refinery has verified that they do have Group 1 wastewater streams. Therefore, some wastewater streams are subject to 40 CFR 63, Subpart CC. 40 CFR 63.640(o) states that Group 1 wastewater streams that are subject to 40 CFR 60, Subpart QQQ are only required to comply with 40 CFR 63, Subpart CC. 40 CFR 63.647 states that Group 1 sources shall comply with the requirements of 40 CFR 61, Subpart FF, sections 340 through 355. The 40 CFR 61, Subpart FF requirements have been inserted in the "Facility" table of the permit at the section level. More detail will be added in the first or second revisions of the permit.

Supplemental EPA Comments:
Citations for Sections 61.340-61.355 (see Table IV-A, Facility B2758) have been added to the facility table; however we believe that the District should also add citations to the unit-specific tables.

In addition, a citation to 40 CFR 61.357(g) should be added to Table IV-A. Since §61.352 is included in the permit, this paragraph should be included as well.

9/03 *EPA Comment: The permit must specify the record keeping and reporting requirements under section 63.647(c) (40 CFR Part 63 Subpart CC) that apply to the facility. The current permit does not. The following language should be included in the permit:*

> *63.647(c) - If the owner or operator is required under subpart FF of 40 CFR part 61 to perform periodic measurement of benzene concentration in wastewater, or to monitor process or control device operating*

parameters, the owner or operator shall operate in a manner consistent with the minimum or maximum (as appropriate) permitted concentration or operating parameter values. Operation of the process, treatment unit, or control device resulting in a measured concentration or operating parameter value outside the permitted limits shall constitute a violation of the emission standards. Failure to perform required leak monitoring for closed vent systems and control devices or failure to repair leaks within the time period specified in subpart FF of 40 CFR part 61 shall constitute a violation of the standard.

District Response (#98): The refinery has verified that they do have Group 1 wastewater streams. Therefore, some wastewater streams are subject to 40 CFR 63, Subpart CC. 40 CFR 63.640(o) states that Group 1 wastewater streams that are subject to 40 CFR 60, Subpart QQQ are only required to comply with 40 CFR 63, Subpart CC. 40 CFR 63.647 states that Group 1 sources shall comply with the requirements of 40 CFR 61, Subpart FF, sections 340 through 355. The 40 CFR 61, Subpart FF requirements have been inserted in the "Facility" table of the permit at the section level. More detail will be added in the first or second revisions of the permit.

Supplemental EPA Comment:
EPA agrees with the addition of Subpart FF requirements to the "Facility" table; however citations also need to be added to the unit-specific tables.

In addition, a citation to 40 CFR 63.654(a) should be added to Table IV-A.

9/03 EPA Comment: The permit contains a citation for 60.692-5 (NSPS subpart QQQ for refinery wastewater systems) which is for closed vent systems and control devices. The permit contains insufficient information to determine if a control device required. If one is required, please verify whether CAM applies to it. If so, CAM must be addressed in the permit. As the result of a recent conference call, we understand the District will clarify whether CAM applies.

District Response (#99): The comment merits consideration as a future revision to the permit. However, the District believes the proposed permit conditions are appropriate at least for the time being. The District will consider incorporating the suggestion at a later date.

Supplemental EPA Comment:
The permit still contains insufficient information to determine if a control device is required and if CAM applies to it. If one is required, the District should verify whether CAM applies to it. In addition, the District should verify that the permit contains adequate periodic monitoring for any such control device(s) if CAM does not apply.

9/03 EPA Comment: We understand that Unit #606 and #607 wastewater air strippers A and B can no longer use the carbon controls listed in Table VII and the engineering evaluation. If emissions inventory estimates for 2001 are correct significant then particulate emissions of 328 tpy and benzene emissions of 60 tpy for each unit are reduced by at least 90% to comply with SIP rule 8-47-302 (Furnace S-950 may also be used as a control device). Please delete the carbon controls and add periodic monitoring for the emission controls that are used to meet the 20 ppm POC limit in section VI and the 90 % control efficiency. In addition, please provide us with the applicability determination used to delete the benzene NESHAP and MACT from Table IV and Table VII.

District Response (#101): The comment merits consideration as a future revision to the permit. However, the District believes the proposed permit conditions are appropriate at least for the time being. The District will consider incorporating the suggestion at a later date.

Supplemental EPA Comment:
Abatement devices A-606 and A-607 were removed from the permit and continuous temperature monitoring was added to demonstrate compliance with the 20 ppm POC limit. However, it is still unclear why 40 CFR 61, Subpart FF was deleted from Tables IV-I and VII-A of the permit. Please provide us with the applicability determination used to delete the subpart.

Enclosure C - Chevron
April 14, 2004 Update to EPA's September 26, 2003 Comments

COOLING TOWERS

9/03 EPA Comment: A total of 14 cooling towers are identified in the draft permit; however emissions calculations are provided for only three units. The District can not exempt units from monitoring requirements if no data and calculations are available for them. This is especially true for units S-6051, S-6054, and S-6055; these units have additional source-specific emissions limits that are more stringent than those in Rule 8-2-301, which provide the basis for the exemption. Before exempting all of the cooling towers from particulate and POC monitoring requirements, the District should add calculations for the following units to Appendix G: 4018, 4073, 4074, 4076, 4078, 4172, 4179, 4187, 6051, 6054, and 6055. Additional calculations are also required to demonstrate compliance with Part 1 of Condition #14596, Part 1 of Condition #10597, and Part 1 of Condition #10598 for units 6051, 6054, and 6055 respectively.

District Response (#105): The suggested change should be implemented at this time. The change has been made to the permit, based upon the rationale provided in the comment. Appendix G has been amended to include calculations for all operating cooling water towers. Monitoring requirements for these sources have been added to the permit. S-6054 and S-6055 are out of service. S-4078 (Wax Rerun cooling tower) is no longer in operation.

Supplemental EPA Comments:
Although the District indicated that Appendix G of the statement of basis was amended, the appendix that is available on the District's Web site is unchanged. The District noted that sources 6054, 6055, and 4078 are out of service or no longer in operation but a question still remains regarding the status of sources 4073, 4076, 4172, 4187, and 6051.

With regard to the monitoring that is in the permit: Conditions #14596.3, #10597.3, and #10598.3 have been deleted from Section VI of the permit yet they remain in Table VII.C.1.1 as citations for the monitoring requirements for sources S-6051, S-6054, and S-6055, respectively. The District should resolve this discrepancy. In addition, the permit only says "monthly tests" in the monitoring type column for each of these conditions. The permit should be specific about which tests are necessary.

9/03 EPA Comment: According to Table II A of the permit, the daily throughput limits for units 4076, 4172, 4173, 4191, and 4329 are under investigation. At the same time, the calculations in Appendix G have specific values for three of these units. If the throughput limits for units 4173, 4191, and 4329 are still under investigation, these calculations should be removed from the appendix and the units should be subject to monitoring requirements for PM and POC. If the throughput limits are no longer under investigation, the appropriate limits should be inserted into the permit and the emissions calculations should be updated.

District Response (#107): The comment merits consideration as a future revision to the permit. However, the District believes the proposed permit conditions are appropriate at least for the time being. The District will consider incorporating the suggestion at a later date.

Supplemental EPA Comments:
Where the permit used to say that the throughput limits were under investigation, it is now blank. Without throughput limits specified in the permit, the calculations provided by the District do not have a sound basis and should not be used to justify that no monitoring is needed to assure compliance with BAAQMD Regulation 6 and Regulation 8-2. With respect to the cooling

towers *at all of the refineries*, EPA recommends that the District do one of the following:

1. Update the calculations in Appendix G of the statement of basis so that they are more accurate and demonstrate compliance with the applicable requirements. In doing so, the District should provide calculations for all cooling towers in the Title V permit, regardless of their current operational status. In addition, the District should ensure that the water circulation rates used for the calculations are accurate and included in the permit. Lastly, Appendix G states that the District opted to use AP-42 emission factors for the calculations despite the availability of actual drift and total dissolved solids data. Because the emission factors are poorly rated, EPA recommends the use of the source-specific data where it is available.

2. Require that the refineries conduct tests to verify the appropriateness of the AP-42 emission factors or obtain source-specific data if it is not already available.

3. Require periodic monitoring of the sources for which accurate and reliable calculations can not be provided through either of the options above.

EMISSION CAPS

9/03 EPA Comment: We understand the BAAQMD has determined that caps have created implementation problems. In order to assure compliance with the cap emission limits, we recommend that the District make any necessary revisions in addition to those noted below.

1. *We appreciate the District's commitment to replace ambiguous language regarding fugitives from "existing process units" and instead clearly state which fugitives are included and which are excluded. Also, the permit must clarify whether the limits are adjusted for new fugitive sources, p302, condition H (Comment #108).*

2. *We appreciate the District's commitment to clarify that the "equivalent reductions" authorized on p300, condition 9E, must also meet the District's SIP-approved NSR rule to qualify as offsets (Comment #109).*

3. *Please delete conditions for burning fuel oil (for example p307), as they conflict with the prohibition on p297, condition 6(A) (Comment #110).*

4. *We appreciate the District's commitment to clarify that emission caps may be used as an offset baseline (p301, condition G) only if allowed under the approved SIP rule; and to delete the variance provision or clearly state that it does not affect federal enforcement (p302, K) (Comment #111).*

5. *Please specify which units will use CEMs data on p295-296 and indicate how emissions will be determined for other units (some of which could use emission factors on pp 320-327 that could differ based on whether they are "new" or "existing" sources) (Comment #112).*

6. *We recommend clarifying the source testing requirements that will be used to verify compliance with the cap. For instance, we understand that the District, CARB, and South Coast test data indicate that wharf emission factors are understated, including uncontrolled loading of "low pressure" materials (Comment #113).*

7. *We appreciate the District's commitment to state the effective date of the cap or remove unclear language regarding this date on p302 (Comment #114).*

Enclosure C - Chevron

Additional Background - The following 9/26/03 EPA comments on the Tesoro emission caps provide additional background for corrections that were necessary for both Tesoro and Chevron (the Tesoro emission caps were generally corrected but the Chevron caps were not).

Variance Exemptions -
The permit allows the exclusion of any emissions for which a variance has been granted (page 609 (K) and 642 (K)). We appreciate the District's commitment to deleting these two paragraphs or stating that they do not affect federal enforceability of the cap. Variances may not be included in Title V permits as federally enforceable requirements, and are also prohibited from State Implementation Plans. For more information, see *Industrial Environmental Association v. Browner*, No. 97-71117 (9th Cir., May 26, 2000) and 62 FR 34641 (June 27, 1997). For instance see: FRN p80278 - middle col. 52.21 defn's 52.21(b)(48)(ii)(a & b).

NSR Applicability Baselines
The permit allows the use of the cap as a baseline for future offset applicability determinations (see pages 609(G) and 641(G)). These caps appear to have been set using a 1977-79 baseline. District SIP approved Rule 2-2-604.2 specifies the offset emission baselines[5] and we appreciate the District's commitment to clarifying in the statement of basis that the cap may only be used as an emissions baseline if allowed under District Rule 2-2-604.2. This clarification should also be added to the permit as soon as possible.

CO Increases
We appreciate the District's commitment to deleting provisions allowing CO increases based on modeling (for example, see page 609-610). The appropriate requirements for approving an increase are specified in the District's SIP approved NSR rule and 40 CFR.

Offset Generation
The proposed permit allows "equivalent permanent emission reductions" as a method of generating offsets to be used on-site without stating the other criteria necessary to generate offsets (for example, see p 634(F)). We appreciate the District's commitment to adding a statement that they must meet the criteria of the District's SIP-approved NSR rule to be used as credits under 634(F).

District Responses (#108-114): The District stated that it would consider the change later (#108, #110, #111, #113, #114) or would not make the change (#112). The District referenced condition #9D in response to our comment #109. For #114, the District noted that the cap was effective 18 years ago but declined to clarify the permit.

Supplemental EPA Comment:
The changes to these federally enforceable limits are still necessary. We noted in Enclosure B of our 10/31/2003 letter that there are a number of instances where the 2003 draft Shell permit contained language that would be a good model for correcting a number of issues - specifically CO increases; NOx CEMs; NSR applicability; and offset generation.

The reference to a general caveat that the conditions of the emissions cap shall not be construed to allow any violation of any rule or law (formerly #9D, the numbering has since been deleted) is

[5]The facility must use recent actual emissions unless the facility fully offset the cap level. This diference could be substantial - for instance the portion of the facilities' 1958 TPY of NOX attributable to the capped units, rather than 2867 Nox (cap#1) or 3182 Nox (cap#2) for a hypothetical applicability determination conducted today.

not sufficient to correct the deficiency that we noted in the comment labeled by the District as #109. Instead, the District should fix the condition consistent with the other emission caps.

FLARES and THERMAL OXIDIZERS

Because of the extent of the changes made to flare conditions in the refinery permits, EPA has reevaluated the permits with respect to flares and thermal oxidizers. Because of the complete rewriting of flare issues in the permits and EPA's reevaluation, we have removed our previous comments from the enclosures, and have addressed any outstanding issues from our original comments, as well as any issues regarding the District's revised flare conditions, in Enclosure A – General Comments.

FLUID CATALYTIC CRACKING UNIT

9/03 *EPA Comment: NSPS requirements 60.104(b)(3), 60.104(c), 60.105(e)(2), 60.106, 60.106(b)(3), and 60.107 must be included in the permit for S-4285.*

District response (#119): The suggested change corrects a mistake. The mistake has been corrected.

Supplemental EPA Comment:
Table IV.C.2.1 provides citations with brief descriptions but does not contain emission limits. In addition, requirements were not added to Table VII.C.2.1. Please add the emission limits to Table IV.C.2.1 and add the requirements, emission limits, and compliance monitoring to Table VII.C.2.1.

New EPA Comments:
1. We have found some problems with Chevron's ESP testing in the March 1, 2004 draft permit. First, the ESP quarterly testing (p. 429) should be marked federally enforceable because it is used to determine compliance with federally enforceable emission limits.

   Second, please delete your proposal to weight each source test result based on the amount of time that has passed since the last source test (Condition 11066, BACT, p. 325). It appears that this change was introduced in the 12/1/03 version of the permit without EPA or public review, and was also included in the March 1, 2004 draft permit. The test results would be weighted based on the amount of time between each test, multiplied by each test result, and divided by the number of tests and 365 days a year. For instance, if the source test resulted in a number over the 21 lbs/hr limit the refinery could test again in a week and the result would only be weighted 2% toward their annual result. On the other hand, the source could wait 9 months following a favorable test result and weight that test by 75%.

In our 9/26/03 and 10/31/03 comments, we noted that the ESP monitoring in the Chevron permit would serve as a good example of parametric monitoring that could be required for ESPs at the other refineries. We still believe that the ESP monitoring parameters in Chevron's permit can be used as an example of good parameter monitoring.

2. Table VII.C.2.1 states that compliance with the SO_2/1000 kg coke limit is based on SO_2 CEMs and process monitoring for air inlet rate to regenerator. It is not clear how the coke burn-off rate would be calculated from the air inlet rate. Please clarify how the burn-off rate will be calculated.

STORAGE TANKS

9/03 EPA Comment: It is unclear why conditions 4233, 12580, and 18137 are not federally enforceable in the permit. Permit conditions originating from SIP-approved permits (such as those issued pursuant to NSR or PSD permit programs) should be identified as federally enforceable.

District Response (#126): The argument supporting a suggested change is incorrect as a matter of law. No change has been made to the permit. Permit conditions are not automatically federally enforceable simply because they are contained in permits issued pursuant to a federally-approved NSR permit program. The District imposes permit conditions to enforce both federal and state-only requirements. Each of the permit conditions mentioned in the comment was imposed to address non-federal applicable requirements, and each is therefore correctly labeled non-federally-enforceable. The comment does not assert that these particular permit conditions implement federal requirements.

Supplemental EPA Comment:
As discussed in the guidance documents previously sent to the District, all terms and conditions originating a SIP-approved permit are federally enforceable. All such terms and conditions (including those noted above) in all five of the refinery permits should be marked as federally enforceable. Please refer to the letter to Robert Hodanbosi and Charles Lagges, STAPPA / ALAPCO from John S. Seitz, OAQPS, dated May 20, 1999.

9/03 EPA Comment: The frequency specified for many tank monitoring requirements in all of the permits is "not specified." In cases where the monitoring frequencies are not specified in the applicable requirements, the District should establish appropriate ones.

District Response (#127): The suggested change corrects a mistake. The mistake has been corrected in the final permit.

Supplemental EPA Comment:
Although the mistake was corrected in some cases, the March 1, 2004 draft permit still contains instances of the unspecified monitoring frequency discussed in the original comment. The following instances still need to be corrected:

Tanks:
Table VII.F.1.7 for Regulation 8-5-306
Table VII.F.1.12 for Regulation 8-5-306 and 60.112b(a)(3)(i)

Separators:
Table VII.G.1.4 for Regulation 8-8 sections 301.3, 302.1, and 302.3

SULFUR TREATMENT EMISSIONS

9/03 EPA Comment: The requirements for 9-1-313, 9-1-313.2, 1-522 and 1-522.7 for units S-4227, S-4228, and S-4229 should be federally enforceable because the rule citations are in the SIP.

District response (#130): The suggested change corrects a mistake. The mistake has been corrected.

Supplemental EPA Comment:
Rules 1-522 and 1-522.7 are marked not federally enforceable for units S-4227, S-4228, and S-4229 (Table IV.E.2). Please label these SIP requirements as federally enforceable. In addition, please label the throughput limits in Table IV as federally enforceable. These limits are included in Condition 19063 of the March 1, 2004 draft permit, with a citation to "cumulative increase." We understand that the citation to "cumulative increase" indicates that the conditions were established as part of a New Source Review action related to offsets.

THROUGHPUT LIMITS

New EPA Comment:
Condition 18137, Part I (p363) states that an exceedance of the throughput limit for a grandfathered source is not necessarily an exceedance. However, this condition is missing the caveat that thresholds for grandfathered units cannot be used to establish a presumption that NSR does not apply. To clarify the purpose of these thresholds, please include language such as that used in Section I, Condition J of the Chevron permit instead of the current language.

VOC COMPONENT FUGITIVES

9/03 EPA Comment (Table IV.H.2.1, p275-278, and Table VII.H.2.1, p477-481): CFR 40 Part 61, Subpart FF Please add more of the requirements from 40 CFR 61.349 (Subpart FF) to tables IV and VII.

District Response (#132): The suggested change corrects a mistake. The mistake has been corrected in the final permit.

Supplemental EPA Comment:
We appreciate the changes that the District made in response to this comment. We would also recommend adding the following requirements from subpart FF:

- Add the requirements of 61.349(a)(1)(ii), (iii), and (iv).
- Change the wording for 61.349(c) to "Demonstration of compliance for control devices other than flares."
- Change the wording for 61.349(d) to "Demonstration of compliance for flares."
- Change "administration" to "administrator" for 61.349(e).
- Add the requirements of 61.349(f): "Each closed-vent system and control device shall be inspected quarterly." The permit currently contains monthly sampling and recordkeeping in Table VII to determine compliance with 61.349(f) and 61.354(c). However, 61.354 has requirements for continuous monitors. These requirements should be included in Table VII. Please note in the permit that these continuous monitors are for determining compliance with 61.349(a)(2).
- Additionally, 61.349(a)(1)(ii) requires the installation of a flow indicator that records vent stream flow at least once every 15 minutes under certain circumstances. This needs to be included in Table VII, unless this particular requirement is not applicable to Chevron.
- Include recordkeeping for 61.349(g).

New EPA Comment: Please add periodic monitoring for miscellaneous refinery equipment subject to the Regulation 8-18-304 100 ppm leak limits. (See Table VII.H.2.1 on p.475)

9/03 EPA Comment: Please include more detail for the requirements of 40 CFR Part 60, Subpart QQQ in Table IV, and add limits and monitoring to Table VII, as needed.

District Response (#133): The suggested change corrects a mistake. The mistake has been corrected in the final permit.

Supplemental EPA Comment:
We appreciate the changes that were made in response to our comment. However, we recommend adding more detail to Table IV. Below is an example of the minimum level of detail we would like to see to help ensure compliance with these requirements.

60.692-2
(a)(1): Each drain equipped with water seals.
(a)(2): Drains in active service inspected initially and monthly.
(a)(3): Drains not in active service inspected initially and weekly, except as provided in (a)(4).
(a)(4): Drains not in active service with tightly sealed caps or plugs inspected initially and semi-annually.
(a)(5): Water added or first attempts at repair as soon as possible, but not later than 24 hours

after detection.

Etc....

We also recommend adding monitoring to Table VII for 60.692-2(a)(2), (a)(3), (a)(4), (a)(5); 60.692-2(b)(1)-(4); 60.692-2(c)(1)-(3); and 60.692-3.

9/03 EPA Comment [With regard to 40 CFR Part 60.482-10(c) and 61.242-11(c), Table IV.H.2.1]: Please specify which limit the refinery will be using. We recommend a 0.75 second residence time, with the temperature maintained at 816 ^{0}C.

District Response (#137): The facility has the right to use either limit. Both options are therefore listed.

Supplemental EPA Comment:
Please clarify whether the source will be using the 95% control efficiency compliance option or the minimum temperature and residency time option. If the facility wishes to have the option for both, please add an alternate operating scenario to the permit. The District should also identify which closed vent systems and control devices are being used to comply with this section. (Please also see the monitoring comment below, which was numbered by the District as comment #158/159.)

9/03 EPA Comment [With regard to 40 CFR Section 60.692-5(a), Table VII.H.2.1]: The monitoring included is inappropriate for this limit. Please add continuous temperature monitors and gas flow meters. The residence time and temperature requirements of this limit need to be included in the permit for all applicable units.

District Response (#150): No change has been made to the permit. The District will review the issues raised by the comment, and will take appropriate steps at a later date. The thermal oxidizers are equipped with temperature monitors and the furnaces are required to be in service at all times that the vapor collection system is in service. The 95% standard is a design criteria that was reviewed upon installation. The district will request further information from the facility to demonstrate compliance.

Supplemental EPA Comment:
The requirement included in Table VII.H.2.1 of the permit is: "closed vent system using combustion devices shall have 0.5 sec. Residence and 816 degrees C." The monitoring included in the permit for this requirement is: "repair after emissions are detected within 30 days." This monitoring does not make sense for a residence time and temperature requirement. Both of these parameters can and should be monitored. Temperature should be monitored using a continuous temperature monitor, and an appropriate residence time should be assured by monitoring flow rate. Residence time may then be calculated from the flow rate. Please note that while the District's response indicates that the thermal oxidizers are equipped with continuous temperature monitors, there is no evidence of this is Table VII.H.2.1. Please note that the residence time is incorrectly cited as 0.5 seconds. Please correct this to read 0.75 seconds.

9/03 EPA Comment (CFR 40 Part 60, Subpart VV and Part 61, Subpart V):
Please make the following changes [note: parts 1-3 and 6-13 of the original EPA comment were removed]:

4. 60.482-10 (b) and 61.242-11(b): Include a monitoring method to determine compliance with the 95%

control efficiency requirement.

5. *60.482-10 (c) and 61.242-11(c): If the limit used is 95% efficiency, please see the comment above. If the limit used is residence time and temperature, please add continuous gas flow meters and temperature monitor. Please also add these requirements to all equipment subject to this rule.*

District Response (#158 & 159): No change has been made to the permit. The District will review the issues raised by the comment, and will take appropriate steps at a later date. The thermal oxidizers are equipped with temperature monitors and the furnaces are required to be in service at all times that the vapor collection system is in service. The 95% standard is a design criteria that was reviewed upon installation. The District will request further information from the facility to demonstrate compliance.

Supplemental EPA Comment:
NSPS 60.482-10(e) and NESHAP 61.242-11(e) clearly require monitoring to assure that the control devices subject to 60.482-10(b) and (c), and 61.242-11(b) and (c), are maintained and operated in accordance with their designs:

"Owners or operators of control devices used to comply with this subpart shall monitor those control devices to ensure that they are operated and maintained in accordance with their designs."

While the control devices at Chevron may be designed to operate at a 95% control efficiency, requirements for monitoring and recordkeeping should be included in the permit to show that these devices are operated to achieve 95% control efficiency. The control efficiency of thermal oxidizers depends on design, temperature, and residence time. Temperature should be monitored using a continuous temperature monitor, and an appropriate residence time should be assured by monitoring flow rate. Residence time may then be calculated from the flow rate. Please note that while the District's response indicates that the thermal oxidizers are equipped with continuous temperature monitors, there is no evidence of this is Table VII.H.2.1, which includes no monitoring for 60.482-10 (b) and (c) and 61.242-11 (b) and (c).

WASTEWATER AND PROCESS DRAINS

9/03 EPA Comment: We were unable to review this section of the permit due to time constraints. However, as noted in our general comments, please make all revisions noted in our comments for other facilities that also apply to this permit.

District Response (#170): The argument supporting the change does not contain sufficient information or analysis to support the change.

Supplemental EPA Comment:
1. Treatment Unit Cluster 10 - Table VII.G.1.1 states that the 40 CFR 61 Subpart FF requirements related to control of air emissions for WMUs are listed in the templates for each WMU. What and where are the "templates"? Applicable requirements of 61.343 - 61.347 should be listed for each "wastewater cluster."

2. Wastewater Cluster 20d - Why are these process drains not subject to Subpart QQQ? Under the title of Table IV.G.1.2, under the header "Process Drains Cluster 20d," there is a sub-header of "Process Drains Not Subject to QQQ." This sub-header is also in Table VII.G.1.2, under the header "Wastewater Cluster 20d." Please provide an explanation or add this requirement to the permit.

Based on a response from BAAQMD, we understand that Tables IV and VII for "Fugitive Components" list NSPS Part 60 Subpart QQQ. However, this does not answer the above question.

3. Please clarify in the Title V permit whether section 8-8-112 applies. Per 8-8-112, the requirements of 8-8-301, 302, 306, and 308 do not apply to the separator if the influent wastewater is less than 20 C (60 F) and/or the wastewater is comprised of less than 10 ppm volume of critical organic compounds provided 8-8-502 is met. The permit includes 8-8-112 as well as other requirements that may not apply according to 8-8-112.

4. Please verify whether the facility has slop oil vessels. If so, rules 8-8-305, 8-8-305.1 and 8-8-305.2 apply. Also note that 40 CFR Part 60, Subpart QQQ 60.692(d)-(e) applies to slop oil vessels.

5. Please verify whether sludge dewatering occurs at the facility. If so, rule 8-8-304 may apply.

6. Please verify whether the waste streams for each of the "wastewater clusters" falls under Group 1 or Group 2 for refinery MACT standards (40 CFR Part 63 Subpart CC). This must be clear in the permit to determine what requirements apply to the wastewater treatment system.

7. Please verify whether the waste streams for each of the "wastewater clusters" falls under Group 1 or Group 2 for 40 CFR Part 63 Subpart FF (Subpart CC for WWTPs at refineries require the refinery to comply with 61.340-61.355 standards under NESHAP part 61 subpart FF and 63.647 under part CC for group 1 sources). This must be clear in the permit to determine what requirements apply to the wastewater treatment system. Currently, in Tables IV and VII, for various clusters, it is stated that certain emission units are exempt from controls and that there are no 40 CFR 61 Subpart FF requirements related to control of air emissions for WMUs that are exempt from controls. However, it is unclear as to why these units are exempt from controls.

8. For Cluster 10, all options of Subpart FF are listed, e.g., §§61.342(a), (b), (c), (d), (e). The source should know at least whether their total annual benzene quantity is greater than 10 Mg/yr. If the total annual benzene quantity from the facility is less than 10 Mg/yr, the source is exempt from §§61.342 (b) and (c); in that case, §§61.342 (b) and (c) would not need to be listed in the permit. If the total annual benzene quantity from the facility is greater than or equal to 10 Mg/yr, the source should choose whether they will be complying with §61.342(c), (d), or (e), and only one of those options should be included in the permit unless the District includes alternate operating scenarios with appropriate compliance and monitoring requirements for each scenario.

Please refine the permit to more specifically show the option with which the refinery plans to comply.

We understand from BAAQMD staff that A-3200 is not an incinerator (see comment below regarding A-3200). In that case, only §61.348(a)(1)(i) or (a)(1)(ii) would apply, not (a)(1)(iii).

9. Abatement device A-3200: This appears to be an abatement device for S-3200. However, in Table II-B, the sources controlled are listed as S-3110, -3111, and -3192. Shouldn't S-3200 be listed? We understand from BAAQMD staff that A-3200 is a carbon adsorption system, not an incinerator. We understand that BAAQMD will modify Table II-B to include S-3200 and to clearly indicate the type of abatement device A-3200 is.

However, note that there is a contradiction in Section VI, Condition #4650, of the permit. Condition #4650 contains references to "the A-3200 furnace F-1100B incinerator" and "the A-3200 furnace."

10. The permit must specify the recordkeeping and reporting requirements under section 63.647(c) (40 CFR Part 63 Subpart CC) that apply to the facility. The current permit does not. The following language should be included in the permit:

> 63.647(c) - If the owner or operator is required under subpart FF of 40 CFR part 61 to perform periodic measurement of benzene concentration in wastewater, or to monitor process or control device operating parameters, the owner or operator shall operate in a manner consistent with the minimum or maximum (as appropriate) permitted concentration or operating parameter values. Operation of the process, treatment unit, or control device resulting in a measured concentration or operating parameter value outside the permitted limits shall constitute a violation of the emission standards. Failure to perform required leak monitoring for closed vent systems and control devices or failure to repair leaks within the time period specified in subpart FF of 40 CFR part 61 shall constitute a violation of the standard.

Enclosure D - Valero
April 14, 2004 Update to EPA's September 26, 2003 Comments

COGENERATORS

9/03 EPA Comments:

1. *Please clarify in the permit that the District assumes 100% conversion of H_2S to SOx emissions (p144; Table IV A22.1 condition 19177) when determining compliance with the SOx limits in the permit.*

2. *We recommend requiring that Valero test for PM10 and sulfur compounds at maximum H_2S content (p160; Table IV A22.2 condition 19177).*

District Response:
#171: See condition 19177, part 22a.

#172: Tests are conducted under "as-found" conditions. The refinery does not vary fuel gas sulfur content at will, and could not comply with a requirement to conduct tests at a particular concentration.

Supplemental EPA Comment:
It appears that the District did not address the first comment or fix the permit. Please make this change.

EPA disagrees with the District's second response. Valero should test PM_{10} and sulfur compounds at maximum H_2S content fired unless Valero can provide adequate justification for only testing under "as-found" conditions, such as low variability and a wide margin of compliance. We expect that emissions of sulfur compounds would be directly related to the amount of H2S and other sulfur compounds in the fuel. We would also expect that the sulfur content of the fuel can contribute to the formation of sulfate particulates. Therefore, it would not be appropriate for the facility to test under conditions that would allow the facility to pass the source test if it may not pass the test under other conditions.

COMBUSTION UNITS

9/03 EPA Comment: The permit contains a federally-enforceable restriction on the heat input for a number of units (p.473); however the restrictions are marked not federally enforceable in several places (for instance p.68, p.69, p.79, etc). Please change the designations to federally enforceable.

District Response (#174): The argument supporting a suggested change is incorrect as a matter of law. No change has been made to the permit. The Alternative Compliance Plan is not federally enforceable.

Supplemental EPA Comment:
The District did not make the suggested change and did not explain why in some cases the heat input restrictions are federally-enforceable, while in other cases the restrictions are not. Please make these conditions federally-enforceable, or explain why the District believes that the permit conditions are not federally enforceable.

ELECTROSTATIC PRECIPITATORS

9/03 EPA Comment: As discussed in our comments for the Tesoro permit, the District must require periodic monitoring for the ESPs controlling units S-5 and S-6 (the facility appears to have a main stack that is common to units 3,4,5,6,10,13,50 in table II-C).

District Response (#179): The suggested change should be implemented at this time. The change has been made to the permit, based upon the rationale provided in the comment. Condition 19466-15 requires a Continuous Opacity Monitor for S-5 & 6.

Supplemental EPA Comments:
The permit contains COMs that cover opacity from the ESPs serving the main stack, including CO boilers S-3 and S-4, the FCCU unit S-5, and the coker unit S-6. However, the permit does not contain a correlation between COMs and PM limits for grain loading and particulate limits. Please include parameters such as current and voltage, or explain how opacity monitoring will assure compliance with particulate limits.

Annual testing is required for particulate emissions from the FCCU unit S-5 and Coker unit S-6, but not for other units such as CO Boilers S-3 and S-4. In other facilities such as Tesoro, the emissions from the FCCU and the Coker are vented to the CO boilers. The CO Boiler then vents to the ESP. If this is the case at Valero, it may be appropriate to also require particulate emissions testing at the outlet of the CO Boilers. Please provide a periodic monitoring determination that covers particulate emissions from these units.

FCCU

9/03 EPA comment:

1. *Requirements for 1-522.1, 1-522.7, 1-602, and 1-604, under Table IV - A4 for S-5 (fluid catalytic cracking unit and catalyst regenerator), should be federally enforceable because these rules are in the District's SIP.*

2. *The permit should contain requirements for 6-305 and 6-401 of the District's SIP.*

District Response:
#181: The suggested change corrects a mistake. The mistake has been corrected in the final permit.

#182: The suggested change should be implemented at this time. The change has been made to the permit, based upon the rationale provided in the comment. Subpart J does not apply per 60.100(d). Added 6-401 to S-5 and S-6, 6-305 does not apply.

Supplemental EPA Comment:
The District corrected the permit for Regulation 1-522.1, but did not correct the permit for Regulations 1-522.7, 1-602, or 1-604. It appears the District added the requirements under Regulation 6-401 but did not add the requirements under Regulation 6-305. Please make these additional changes and explain the District's policy for not including the requirements under Regulation 6-305 in the permit.

Enclosure D - Valero

FLARES and THERMAL OXIDIZERS

Because of the extent of the changes made to flare conditions in the refinery permits, EPA has reevaluated the permits with respect to flares and thermal oxidizers. Because of the complete rewriting of flare issues in the permits and EPA's reevaluation, we have removed our previous comments from enclosures B-F, and have addressed any outstanding issues from our original comments, as well as any issues regarding the District's revised flare conditions, in Enclosure A – General Comments.

PERMIT SHIELDS

9/03 EPA Comment (please note that this comment was originally located in the General Comments section of our September 26, 2004 letter): The second "subsumed requirements" shield is allowed under EPA "White Paper 2" if the District includes permit conditions that assure compliance with the subsumed requirements and demonstrates the reason for the shield. In some cases, this comparison may be relatively straightforward (i.e. a recent gas turbine NOx BACT determination vs the NSPS NOx limit) while in other cases the relative stringency of the rules compared is not as obvious and a detailed streamlining evaluation will be necessary (such as overlapping but different inspection & maintenance programs).

For instance, the demonstration (for instance the Valero permit streamlining of an EPA NSPS & NESHAP in Table IX b-24 on p646) must show that the applicability of the permit conditions will be as broad as the rule that would be streamlined (Comment #16a). As the table itself notes that the Bay Area rule does not cover all of the units that would be shielded from EPA requirements, the District must eliminate this proposed permit shield unless the appropriate permit conditions and demonstration are added. For this second type of shield, please cross-reference the specific permit conditions that will assure compliance with the subsumed requirement(s) and make sure that they are marked federally enforceable in the permit (Comment #17).

District response (#16a and #17): The suggested change should be implemented at this time. The change has been made to the permit, based upon the rationale provided in the comment (#16a). The comment merits consideration as a future revision to the permit. However, the District believes the proposed permit conditions are appropriate at least for the time being. The District will consider incorporating the suggestion at a later date.

Supplemental EPA Comment:
The evaluation does not contain any streamlining demonstration in response to comment 16a. The permit shield itself was rearranged so it is unclear whether a revised evaluation took place. The District needs to provide the streamlining evaluation or remove the permit shield. Please also make the change requested in comment #17.

In addition to the specific permit shield comments from our September 26, 2003 letter, we recommend clarifying the basis for granting Valero permit shields IX.A-2 and A-3 (p605). If the basis is that the sulfur recovery units were constructed prior to October 4, 1976, and were not modified or reconstructed since that date, please state this in the shields.

New EPA Comments:
We would also like to note that the permit shield from the requirement that BAAQMD require periodic monitoring is confusing and may be unnecessary. It appears that the District is concerned that requiring a CEM span of 125 ppm NOx to assure compliance with regulation 9-3-303 is too high, because the source must monitor for the lower Regulation 9-9-303 limits. Instead of a shield from the high limit in the District NOx regulation, however, the District included a shield from the periodic monitoring requirements of Regulation 2.

We do not believe that a shield is necessary because the Regulation 9-3-303 limit is not federally enforceable, and even under the local rules the source must merely show that emissions are less than 125 ppm NOx. Therefore, the rule does not appear to require a 125 ppm span for the CEM. In addition, we do not believe that it is appropriate to write a permit shield to shield the District from complying with Title V permitting requirements, including Regulation 2-6-409.2. Please delete this permit shield.

SULFUR RECOVERY UNIT

9/03 EPA Comment: The requirements under 9-1-301, -305 and-502 of the District's SIP, if applicable, must be included in the permit for S1 and S2.

District Response (# 193): 9-1-301 is in the general applicable Table IV - Refinery. 9-1-305 was deleted from the SIP 20May92. 9-1-502 is not applicable since the Claus units do not emit more than the 100 lb/day limit of 9-1-307.

Supplemental EPA Comment:
Units S-1 and S-2 appear to be subject to SIP Rules 9-1-301 and 9-1-502. Please add these requirements to the permit

New EPA Comment: It appears that 9-1-309 would apply to the SRUs. Please add this requirement or explain why it would not apply.

9/03 EPA Comment: Please clarify whether rules 9-1-606 and -607 apply to S1 and S2 in order to meet Rule 9-1-313.

District Response (#195): The lab methods referred to in 9-1-606 and 607 are now included in Table VIII for 9-1-313.2.

Supplemental EPA Comment:
The District appears to have put the wrong requirements for rule 9-1-606 (analysis of refinery gas streams for H_2S before and after control) in Table VIII of the permit, Regulation 9-1-313.2. For H_2S gas stream abatement, the permit references LAB Method 25 but should reference LAB Method 32, per Rule 9-1-606.

9/03 EPA Comment: The District has proposed deletion of the H_2S monitor installation requirement (Page 422, condition 125, in part V). Instead, please require operation & maintenance of the H_2S monitor.

District Response (#196): The comment suggests a change that clarifies or improves the permit, but cannot be made at this time. No change has been made to the permit. The District will consider incorporating the suggestion at a later date.

Supplemental EPA Comment:
EPA's original comment stands. Please add a requirement to the permit that the source operate and maintain an H_2S monitor.

WASTEWATER TREATMENT AND PROCESS DRAINS

9/03 EPA Comment: The monitoring requirement of 61.357(d)(5) applies if the owner/operator elects to comply with 61.342(e). If 61.342(e) is the chosen option, then the applicant should demonstrate that the flow-weighted annual average water content of facility waste is >/= 10%, as described in 61.342(e)(2).

District Response (#200): No change to the permit was suggested; no change to the permit was made.

Supplemental EPA Comment:
It is clear that the provisions of section 61.342(e) are the selected compliance option. The District should add monitoring to the permit that will demonstrate compliance with the minimum water content requirement specified in section 61.342(e)(2).

9/03 EPA Comment: Please explain why S-161 (Sewer Pipeline) is not subject to 40 CFR 61 Subpart FF and 40 CFR 63 Subpart CC, and if portions of the pipeline are part of "individual drain systems.

District Response (#204): S-161 (Sewer Pipeline) and S-32105 (process drains) are not subject to 40 CFR 63 Subpart CC because they are not subject to specific requirements in 40 CFR 61 Subpart FF. Valero is complying with the 6.0 Mg/Yr benzene quantity (BQ) compliance option set forth in 61.342(e)(2)(i). As an alternative to controlling emissions from individual drain systems in accordance with 61.346, Valero instead elected to remove the major benzene-containing waste streams (such as crude desalter water) from the sewer system, consider any remaining benzene-containing waste streams in the sewer as uncontrolled, and count these uncontrolled streams toward the 6.0 Mg/Yr compliance option.

Supplemental EPA Comment:
It is not clear why the sewer pipeline and process drains are not subject to 40 CFR 61, Subpart FF, nor is it clear how this affects the applicability of 40 CFR 63, Subpart CC. In addition, EPA believes that the sewer pipeline and process drains may be subject to 40 CFR 60, Subpart QQQ. Please provide us with specific applicability determinations for each of these subparts.

9/03 EPA Comment: Please verify that the record-keeping requirements of 61.356 are included in the permit.

District Response (#206): The argument supporting a suggested change does not provide sufficient information or

analysis to support the change. No change has been made to the permit.

Supplemental EPA Comment:
The recordkeeping requirements of 40 CFR 61.356 are missing from Table VII - Refinery; please add them.

9/03 EPA Comment: Please explain why there are no permit conditions or monitoring requirements for refinery process drains (S-32105), and if they are part of "individual drain systems," which would be subject to 40 CFR 61 Subpart FF.

District Response (#209): Please see the response to Comment No.204 regarding Valero's uncontrolled sewer system, as allowed under the 6.0 Mg/Yr compliance option set forth in 61.342(e)(2)(i).

Supplemental EPA Comments:
Please see our supplemental comments to District response #204 several paragraphs earlier.

9/03 EPA Comment: Table VII - H4.1 and H5.1: For S-188 and S-189, the monitoring requirement of 61.354(f)(1) is to ensure compliance with 61.349(a)(1)(ii)(B). The requirement of a flow indicator contained in 61.349(a)(1)(ii)(A) is not required if the requirement of (B) is met. Therefore, a permit condition should be added to Section VI to state the requirement of 61.349(a)(1)(ii)(B).

District Response (#212): The comment merits consideration as a future revision to the permit. However, the District believes the proposed permit conditions are appropriate at least for the time being. The District will consider incorporating the suggestion at a later date.

Supplemental EPA Comment:
The District should add the requirements of 40 CFR 61.349(a)(1)(ii)(B) to the permit as requested in the original comment.

9/03 EPA Comment: Sources A-13 and A-26 are vapor recovery compressor flare gas recovery headers that control sources 9,133,188,189. For S-189, a source test is required to demonstrate collection/destruction efficiency of >/= 70% (Comment #214).

a. *Section VI, Condition 19466, Part 2b (p. 506): The basis for S-189 is listed as Rule 2-6-503. The basis should be changed to Rule 8-8-307.2 (Comment #215).*

b. *The list of equipment under Condition 19466 should include S-189 since Part 2b refers to this emissions unit (Comment #216).*

District Response:

#214: The argument supporting a suggested change is factually incorrect. No change has been made to the permit. A source test requirement is already present in Condition 19466 part 2a.

#215: The suggested change should be implemented at this time. The change has been made to the permit, based upon the rationale provided in the comment.

#216: The suggested change corrects a mistake. The mistake has been corrected in the final permit.

Supplemental EPA Comment:
The change to the permit is inconsistent with the District's response to comments 215 and 216. The District responded that these issues had been corrected but Condition #19466 parts 2a and 2b have been deleted from the permit. Please add the requirements to the permit so they are consistent with the original comments.

Enclosure E - ConocoPhillips
April 14, 2004 Update to EPA's October 31, 2003 Comments

Introduction
Please note that these comments are repeated from our October 30, 2003 letter, as we have not received a response to those comments. We have made a few deletions where we identified that changes were made for other reasons.

ABATEMENT DEVICES

Monitoring

1. For abatement devices A-20 and A-21, the limits for differential pressure are specified as the "normal range" in Table IIB. Because the permit does not state what the "normal range" for the differential pressure is, it does not establish clear requirements for the source. EPA recommends that these generic limits be replaced by the specific numerical values that constitute the allowable range of differential pressures.

2. The only monitoring included in the permit for S-380 and S-389 are quarterly inspections of the differential pressure across the sources' abatement devices. EPA recommends adding additional requirements for visual inspections on an event basis whenever visible emissions are seen exiting the silos.

COMBUSTION UNITS

Applicable Requirements

1. The note in the August 2003 draft permit regarding Condition #1694 says that the original version of Part 5 was deleted because fuel oil is not burned at the facility and the condition is not needed. According to Condition A.2b, however, Sources 3 and 7 are permitted to use liquid fuel. Regardless of current firing practices, as long as the sources are allowed to burn liquid fuel, the original fuel oil limitation and any necessary monitoring requirements should remain in the permit.

2. Please explain the reason for raising the capacity of Source S-300 from 56,000 barrels to 81,000 barrels in Table IIA.

3. Condition #1694, Part A.2b requires that Sources 3 and 7 be monitored for visible emissions during tube cleaning. This applicable requirement should be added to Tables VII - A.2 and VII - A.5. In addition, the condition specifically says that visible emissions monitoring must be conducted during tube cleaning during daylight hours. It is possible to monitor for visible emissions at night. EPA recommends that monitoring for visible emissions be required any time tube cleaning is conducted. Alternatively, the District may restrict tube cleaning operations to daylight hours only.

New EPA Comment: Federal Enforceability

Throughput Limits established in permit Condition 1694: The District has changed the designation for fuel limits that apply to many combustion sources from federally enforceable to not federally enforceable (for example, see Condition #1694 in Table IV - A.2 for Source S-3; similar conditions exist for Sources S-4 through to S-31, and all of the combustion units other than gas turbines and duct burners). The throughput limits in Condition #1694 were established in a prior permitting action, although the permit and the Statement of Basis do not appear to discuss the type of permit nor the reason for marking them non-federally enforceable. Limits created through prior NSR permits are federally enforceable Title V permit requirements. Please see the enclosed March 31, 1999 letter from John Seitz, Director of EPA's Office of Air Quality Planning and Standards, to Doug Allard, CAPCOA President. [6]

In addition, the throughput for S-10 in Condition #1694 was increased from 184 to 223 MMBtu/hr without an explanation. The District should retain the 184 mmbtu/hr limit or justify the change.

Monitoring

The BAAQMD Continuous Emission Monitoring Policy and Procedures manual is designated as non-federally enforceable throughout the permit (for example, see Table IV - A.6 for Source S-8 on page 43). This manual was approved into the SIP on 05/03/1984 and is therefore a federally enforceable requirement. The District should revise the permit accordingly.

COOLING TOWERS

Applicable Requirements

It appears the cooling towers and all of their applicable requirements were omitted from the draft permit (except for BAAQMD Regulation 11, Rule 10 on page 24). The cooling towers listed in the cooling tower calculations (and any additional towers not included in the calculations) should be incorporated into the permit.

Miscellaneous

Two sources are included in the cooling tower calculations but are listed in the permit as units other than cooling towers. For each of the following, the District should revise the permit or the calculations to reflect the true nature of the sources:

a. S-110 - listed in the permit as Tank 155
b. S-238 - listed in the permit as Used Caustic Tank T-211.

In addition, S-236 is included in the cooling tower calculations but is not in the permit.

[6]Note that the referenced document was enclosed with our October 31, 2003 letter.

Enclosure E - Conoco-Phillips

FLARES and THERMAL OXIDIZERS

Because of the extent of the changes made to flare conditions in the refinery permits, EPA has reevaluated the permits with respect to flares and thermal oxidizers. Because of the complete rewriting of flare issues in the permits and EPA's reevaluation, we have removed our previous comments from enclosures B-F, and have addressed any outstanding issues from our original comments, as well as any issues regarding the District's revised flare conditions, in Enclosure A – General Comments.

FUGITIVE SOURCES (PRESSURE RELIEF VALVES, PUMPS, COMPRESSORS)

Applicable Requirements

1. Table IV - AA indicates that 40 CFR 61 Subpart V is neither applicable on a refinery-wide basis nor applicable to any of the sources that are individually listed. It is unclear why the District has made this conclusion. The District should re-evaluate the applicability of this subpart, include all appropriate applicable requirements in the permit, and provide EPA with a complete applicability determination.

2. Table IV-AB shows that NSPS Subpart QQQ is applicable to Source S-1007. This source should be added to Table IV-AA.

3. According to Table IV-B5, S-388 is subject to Part 3 of Condition #1860, which requires that the source be included in the fugitive emission monitoring program required by Regulation 8-18. This source and condition are not included in Table IV-AA and should be added.

4. Table IV-AA indicates that S-324 is subject to the requirements of 40 CFR 60 Subpart QQQ. This source should be identified in Table IV-AB as a unit that is subject to Subpart QQQ along with S-1007.

5. Table IV-AB is missing applicable requirements from 40 CFR 60 Subpart VV. The following should be added to the permit:
   60.482-2(c) - Pump leak repair period
   60.482-7(d) - Valve leak repair period

6. Table IV-AB is missing an applicable requirements from 40 CFR 63 Subpart CC. The following should be added to the permit, which applies to pumps and valves if the refinery has started up any new sources:
   63.648(d) - New sources

Federal Enforceability

The 11/27/02 amendment to BAAQMD Regulation 8-18 has been added to the SIP. Therefore, requirements 8-18-405 and 8-18-406 should be identified as federally enforceable in Table IV-AB. Upon doing so, the District should also delete the redundant requirements for SIP Regulation 8-18 from the table.

Monitoring

We understand that the District will require the refineries to demonstrate compliance with SIP Regulation 8-10 by monitoring the pressure of all of the pressure vessels.

Miscellaneous

The adoption date for SIP 8-28 was misprinted in Table IV-AB on page 144. The date should be changed from 12/9/94 to 6/1/94.

HYDROGEN PLANT

Monitoring

Pursuant to BAAQMD Condition #6671 and Regulation 8-2-301, S307 has a vent scrubber (A-50) to meet a 15 lb/day POC limit from emission streams with more than 300 ppm total carbon. EPA agrees that the rule limits are necessary for hydrogen plants at each of the refineries because hydrogen plant vents (presumably CO_2 vents) can emit over 15 lbs/day. We believe that parameter monitoring to ensure proper operation of the control device is necessary and that testing will be necessary if the facility is not well under its emission limits (see Table VII-N, which only has requirements for visual inspections). We also believe that Reg 8-2 and monitoring requirements should apply to the CO_2 vents at the hydrogen plants for each refinery.

LOADING RACKS

Monitoring

According to Table II B, the marine terminal thermal oxidizer, A-420, must meet either of two limits:

1) 2 pounds POC per 1,000 barrels loaded; or
2) achieve a reduction of POC emissions of at least 95% by weight.

To demonstrate compliance with the above limits, Table VII - S (page 347) requires continuous monitoring of the device's temperature. EPA recommends adding a requirement for an appropriate residence time (with a gas flow meter as a monitoring method for the flow rate) to help ensure that the oxidizer meets the required control efficiency.

PERMIT SHIELDS

The proposed permit contains a "subsumed requirements" permit shield from the floating roof tank requirements based on a request from Unocal in 1987 for alternate NSPS Subpart QQQ conditions. Please remove the shield or provide us with a copy of the EPA approval document, or the date and name of the person who approved it.[7]

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[7] *Update to October, 2003 comment:* The ConocoPhillips permit contains a shield based on a request from ConocoPhillips rather than EPA approval of their proposed alternative control.

Enclosure E - Conoco-Phillips

TANKS

Monitoring

1. The frequency specified for multiple tank monitoring requirements in the permit is "not specified." In cases where the monitoring frequencies are not specified in the applicable requirements, the District should establish appropriate monitoring conditions. Occurrences of the unspecified monitoring frequency were noted in Tables VII - B11, VII - B12, VII - B15, and VII - B25.

2. For tanks that are exempt from Regulation 8-5, based on low vapor pressure, the District requires monitoring of the vapor pressure when there is a change in the type of material that is stored (see Condition #20773.1). The District should also require that initial vapor pressure determinations be conducted to demonstrate initial compliance with the exemption. In addition, the condition says that if the results of the monitoring yield a vapor pressure greater than 0.5 psia, the Permittee must submit an application for a permit to operate for the tank "as quickly as possible." This requirement is not practically enforceable. The District should revise the condition so that it requires a permit application within a specific period of time.

"As described in the NSPS Subpart QQQ Request for Alternative Standards pursuant to 40 CFR 60.693-2(b) and 60.694 submitted to USEPA by Unocal on December 28, 1987, in lieu of a floating roof equipped with a closure device, the separator would be equipped with the full contact fixed roof as an equivalent closure device." This permit shield has been reworded since our comment, but still does not have a valid basis. Alternatives under 40 CFR section 60.694 require publication in the Federal Register of EPA approval of the alternative, and there is no indication of any such notice for the concrete roof tank cited in Condition 1440 Part 1. Notification under 60.693-2(b) does not replace the requirement for approval by EPA for alternatives. Please delete the shield unless ConocoPhillips has received approval for their proposed alternate control.

Enclosure F - Shell Martinez
April 14, 2004 Update to EPA's October 31, 2003 Comments

Introduction

Please note that these comments are repeated from our October 30, 2003 letter, as we have not received a response to those comments. We have made a few deletions where we identified that changes were made for other reasons.

ABATEMENT DEVICES (Table II B)

Monitoring

1. As noted in our comments for the proposed Tesoro permit (EPA letter to BAAQMD, dated September 26, 2003, Enclosure B, p.1), it is unclear what monitoring is required to ensure that the abatement devices in Table IIB meet their emission limits or required control efficiencies. With a few exceptions, Table IIB is completely void of this information. For abatement devices that are subject to monitoring (e.g., baghouse monitoring), all of the applicable requirements should be included in the table. In addition to making the monitoring requirements clearer, this revision will also make Shell's draft permit more consistent with the draft permits for the other refineries (see Table IIB in Chevron's draft permit).

CATALYTIC CRACKING UNIT

Applicable Requirements

1. The permit should clarify that the NSPS particulate matter limit increase is allowed only if the CCU exhaust is passed through an incinerator or boiler in which auxiliary fuel is combusted; the current conditions allow an increased limit with an unclear reference to "auxiliary fuel" (Table VII-G, S1426).

2. For Source 1426, Table IV-AP includes several regulations for emission limits. Please clearly define numerical limits for 9-1-310.1, sulfur dioxide limit; 60.102, standard for PM; 60.102(a)(1) and (a)(2); 60.102(b); 60.103, and 60.104(b)(2). All numerical limits should be defined in the permit. Where a numerical limit is included in one part of the permit, such as Section VI, but not another, it would be helpful to add cross-referencing.

Monitoring

1. Please add periodic monitoring for ESP operation. Examples of monitoring approved by EPA include (but are not necessarily limited to) parameter monitoring, based on specified ranges for the voltage and current, periodic stack tests, and COMs. For additional discussion, please see the section on electrostatic precipitators in this enclosure and the Tesoro enclosure.

2. We recommend stating that the records used to ensure compliance with the "daily profile" condition for S1426 (Table VII-G) will be based on the actual emissions

monitored by CEMs where available (also for S1494, etc., S1759l, and throughout the permit). We understand that if current data shows that incorrect assumptions were made originally during determination of baseline emissions, or that incorrect emission factors were used for new equipment, then permit revisions outside the scope of this proposed Title V permit may be necessary.

3. For Source 1426, Table VII-AG lists recordkeeping as the monitoring method for the SO_2 limit pursuant to 60.104(b)(2). NSPS Subpart J, 60.106(i) outlines the appropriate monitoring to determine compliance with 60.104(b)(2). Please add this monitoring to the permit.

COMBUSTION UNITS

Federal Enforceability

For Source 4161, Table IV-CU: Please include a federally enforceable requirement to use the SCR at all times (see permit Condition 12271, Part 31).

Start-up/Shut-downs (Condition 12271)

1. The proposed permit contains start-up and shut-down exemptions that appear excessive for the gas turbines (Section VI, Condition #12271). Condition 24b states that limits described as offset limits do not apply during days with start-ups or shut-downs, and Condition 24c grants an exemption from BACT limits for start-up and shut-down periods that are allowed for up to 24 hours (see Condition 22, which allows 24 hours for units with selective catalytic reduction). The proposed permit would not assure compliance with BACT and offset limits because the permit appears to allow the source to continuously avoid them if the refinery cycles the gas turbine on and off each day. We believe that these exemptions are inappropriate and would like to discuss with the District the origin of these exemptions and the best way to correct them. In addition, it would also undermine the basis for the offset limits. We will be happy to share examples of appropriate start-up and shut-down conditions from other gas turbine permits if you find them helpful.

   In addition, the proposed permit would exempt other combustion units from BACT for eight hours if they do not have SCR, and 24 hours if they do have SCR (see also Conditions 29, 30, 35, 36, 40, 41, 42) during start-ups and shut-downs. These exemptions also seem excessive unless there is a specific reason why a unit would need a long start-up or shut-down period without using emission controls.

2. In addition, conditions from the prior permit are phrased to apply to the entire permit (i.e. Title V permit), when originally they applied only to permit Condition #12271, which states the exemption. Also, the 72-hour exemption should be specifically limited to any individual unit that cannot comply with BACT under the special

conditions listed under Condition 12271, Part 22a. It could be interpreted to apply to all of the units, including boilers, heaters, and turbines fired on standard fuels.

Combustion of Fuel Oil

Monitoring

1. The permit allows combustion of fuel oil throughout Table II-A, beginning on p.9. However, Condition 12271, Part 24a prohibits fuel oil for units S4190-4193. Please change the provision on p. 9 to state "low-sulfur diesel" for these units and all others subject to a similar restriction. Fuel oil includes fuels with greater emissions than low-sulfur diesel #2. (We would also find it helpful to list all the ratings rather than cross-referencing a condition with those ratings, or at least listing the page number where they are listed.)

2. For all boilers allowed to burn fuel oil (1507, 1509, 1512, 1514, 4190, 4191, 4192, and 4193), please see Comment #1 under Tesoro's "Combustion Units/Monitoring" (EPA letter to BAAQMD, dated September 26, 2003, Enclosure B, p.2).

3. Source 1800, Table VII-BL: Please add monitoring for Rule 6-301 (Ringelmann #1), or explain in the Statement of Basis why no monitoring is needed.

Fuel limits

The District needs to either 1) change the condition to low-sulfur diesel for all units; or 2) perform a new periodic monitoring evaluation. The District is currently relying on a CAPCOA/CARB/EPA Region IX periodic monitoring agreement developed for sources firing low-sulfur diesel (Condition #18618, #3&4). But the permit does not appear to prohibit combustion of fuel oil #6 or other grades of fuel oil. These other fuels typically result in significantly higher PM emissions than the low-sulfur diesel addressed in these agreements (see Air & Waste Management Association Air Pollution Manual pp. 247-8).

CO Boilers

Monitoring

1. The monitoring frequency for SO_x fuel content is listed as one sample per million gallons (CO boilers S1507, S1509, and S1512; p. 478 for S1514 utility boiler). We believe that the original sampling in the 2002 draft permit of once per batch is appropriate based on the CAPCOA/CARB/EPA Region IX guidelines (page 8) and should not be removed. Please note that this limit is also listed a second time on the table based on BAAQMD Condition #7618, Part E.

2. A sliding-scale test frequency is proposed for the SO_3/H_2SO_4 limit on units S1431, 1432, 1765, and 4180, and particulate limits on CO boilers S1507, 1509, and

1512, with a frequency once every three years if the source passes the annual test at less than 50% of the limit. Please explain how the district would monitor parameters or otherwise verify that emissions do not increase during the three years without source testing.

3. We understand that the CO boilers may burn up to 28,000 tpy DAF Float; 36,500 tpy Waste Biosolids; and 4,000 gallons per minute of primary treated wastewater (page 7 of CAL EPA DTSC Hazardous Waste Facility Permit, dated December 30,1995; attached to Adams & Broadwell's September 2002 comments). Please include these materials in the periodic monitoring evaluation and require additional PM source testing, if necessary, to accurately quantify the different emission levels that may occur due to the different materials burned in the boilers.

Miscellaneous
Table II-A states that the CO boilers burn only gaseous fuels or oil. This is inconsistent with the DTSC permit referred to above.

COOLING TOWERS

Applicable Requirements
Source 4210 is subject to the source-specific applicable requirements as Sources 1457 and 1778. Please add this cooling tower to Table IV-AS.

Miscellaneous
The applicable limits and compliance monitoring requirements for Source 4210 listed on Table VII-AJ, and Source 512 Table VII-CJ) could be consolidated into one table for clarity and conciseness.

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EMISSION CAPS

Partial Emission Cap

1. Please explain why fugitives are not included for emission caps, and whether fugitives from new sources are generally included in NSR applicability and offset calculations (Section VI, Condition #12190; this comment also applies to other caps).

2. We would like to know whether the sanctions in Condition # 7618 B on p.323 are intended to be in addition to, or replace, other enforcement authorities.

Variance Exemptions
The proposed Shell permit allows the exclusion of any emissions for which a variance has been granted (p.361 Section VI, Condition #12271). As discussed for the other Bay Area refinery permits, we understand that the District will delete these provisions or state that they do not affect federal enforceability of the cap. We believe this change is also necessary for

the Shell Martinez permit. Variances may not be included in Title V permits as federally enforceable requirements, and are also prohibited from State Implementation Plans. For more information, see *Industrial Environmental Association v. Browner*, No. 97-71117 (9th Circuit, May 26, 2000) and 62 FR 34641 (June 27, 1997). For instance, see: FRN, p. 80278 - middle column 52.21, definitions 52.21(b)(48)(ii)(a & b).

ELECTROSTATIC PRECIPITATORS

Monitoring

As discussed in our comments for the Tesoro permit (EPA letter to BAAQMD, September 26, 2003, Enclosure B, p.2), the District must require periodic monitoring for the Shell ESP. For example, S-1426 ESP has no monitoring per Table II B. (See also our earlier comment on PM10 testing for the CO boiler emissions routed through the ESP).

FLARES and THERMAL OXIDIZERS

Because of the extent of the changes made to flare conditions in the refinery permits, EPA has reevaluated the permits with respect to flares and thermal oxidizers. Because of the complete rewriting of flare issues in the permits and EPA's reevaluation, we have removed our previous comments from enclosures B-F, and have addressed any outstanding issues from our original comments, as well as any issues regarding the District's revised flare conditions, in Enclosure A – General Comments.

FUGITIVE SOURCES (PRESSURE RELIEF VALVES, PUMPS, COMPRESSORS)

We recommend following the same format as used for the other four Bay Area Title V refinery permits, including an applicability matrix, and a table of all applicable requirements and monitoring for all fugitive sources.

Applicable Requirements

1. Facility-Wide Conditions (table IV-DV): The permit lists some facility-wide conditions in table IV-DV, but there is no way to determine what units at the facility are subject to these requirements (including NESHAP Part 61 Subparts M and FF, and NESHAP Subparts A and CC). Please state in the permit what process units are subject to these rules.

2. If the district retains the current format for fugitives, please make Rules 8-18 and 8-28 facility-wide requirements. Most units at the refinery would be expected to be subject to these requirements. However, these rules are not included in the permit for most units.

3. Tables IV-DP through IV-DU: Please specify which units are subject to 40 CFR Part 60, Subparts GGG, VV, and QQQ; 40 CFR Part 61, Subpart FF; and 40 CFR Part 63, Subpart CC.

Monitoring

Vessel Depressurization Rule

We understand that the District will require monitoring of the pressure for all of the pressure vessels to determine compliance with SIP Regulation 8-10.

HYDROGEN PLANT

Applicable Requirements

Hydrogen Plant #3 (Unit 4160): We understand that the District's inventory estimates emissions from this unit alone at 600 tons per year. The Statement of Basis does not include any discussion of rules or emission limits that apply to this unit other than the general throughput limit discussion. Please add to the Statement of Basis a complete review of the limits that potentially apply and the specific limits that the unit must meet, including Regulation 8-2 for the CO_2 vent and any other emission points that are not limited by Regulations 8 or 10, and whether a scrubber or other emission controls are required (a scrubber is required in the proposed ConocoPhillips permit). Please note that Table AM appears to have no requirements.

Please also clarify why upsets, but not routine releases from this unit, are covered in the Condition # 12271, POC limit of 132.0 TPY.

PERMIT SHIELDS

1. There are several significant problems with the proposed permit shields. One type of problematic shield included in the proposed permit is a facility-wide shield[8], which applicable requirements for the entire refinery, and prospectively to an unknown universe of potential future new units. There are dozens of regulations listed in Table IX A-10 pertaining to benzene service, "SOCMI" units, hazardous waste incineration, and electric utility steam generators, among others. The permit does not contain any applicability determinations for these rules, or any conditions to prevent the source from triggering these regulations. The Statement of Basis also does not provide any additional information or justification for the shields. We do not believe that 40 CFR, Subpart 70 allows this type of shield.

2. Please remove the proposed permit shield from NSPS Subpart J for the thermal oxidizers at the Claus unit (A-1501, A-1517, and A-1518). Because these thermal

[8] One example is that Table IX A-10 on p. 540 gives a facility-wide shield from the requirements of 9-1-302, based on the facility meeting the requirements of 9-1-110. While Table III (generally applicable requirements, p. 41) lists 9-1-110 as an applicable requirement, the sulfur limit, referred to in Rule 9-1-110, should be added to the "description of requirement" column.

oxidizers are a part of the Claus sulfur recovery plant, they are subject to NSPS Subpart J (including 60.104(a)(2)) unless the Claus plant itself is exempt. In addition, the District proposed the shield because the thermal oxidizers combust only natural gas. Since they are control devices at a sulfur plant, however, it is reasonable to expect that these units will be combusting more than natural gas.

3. Table IX A-12 contains proposed shields against 60.104(a)(1) and 60.105 for Flares 1471, 1472, 1772, 4201, 101, 102, and 103 based on an emergency/malfunction use only exemption in the NSPS. The permit contains a condition limiting Flares 1471, 1472, 4201, 101, 102, and 103 to emergency/malfunction use. Flare 1772 is not limited to emergency/malfunction use by any condition in the permit. Please add Flare 1772 to the condition limiting the other flares to emergency/malfunction use, or remove it from the permit shield and add 60.104 and 60.105 as applicable requirements.

4. Table IX A-13 shields Flares 1771 and 1772 from NSPS Subpart J with the caveat that the permit shield is "Not applicable only when these flares combust only process upset gases or fuel gas that is released to the flare as a result of relief valve leakage or other emergency malfunction that is exempt from the standard..." This shield is confusing and unnecessary because the regulation itself exempts the flares from the fuel H_2S limit during emergency/malfunction releases. Instead, any shield needs to be justified by *permit conditions* limiting the source to upset/malfunctions. Furthermore, Table IV-BW indicates that Flare 1771 is subject to the fuel H_2S limits of 60.104. Please remove this permit shield in its entirety.

5. In addition to our prior comments on permit shields, we have found that new permit shield language from District Regulation 12-11 was added to the draft permit. This type of shield does not have a valid basis because the rule is not included in the permit as federally enforceable, and the source would continue to be shielded from federal-enforcement of the requirement even after the rule becomes part of the SIP. (We expect that the rule will become part of the SIP because it is part of the District's latest attainment plan). Please delete the shield or include the shielded requirement as a federally enforceable requirement.

Wastewater Treatment

The proposed permit contains Table IX A-8, a permit shield from Regulation 8, Rule 8, Sections 301, 302, 306, and 308 based on the exemptions in Rule 8-8-114. However, there is no apparent reason why Section 114 would exempt these operations, and it never authorizes any exemption from Sections 306 nor 308. Therefore, the proposed permit shield is not allowed under 40 CFR part 70. The District may wish to discuss in the Statement of Basis for the initial Title V permit whether the Regulation 8, Rule 8, Section 113 exemption could apply to these units and consider whether a permit shield based on Section 113 could be justified in a future permit revision.

Process Drains

Table IX A-9, "Process Drains:" The Proposed Permit contains a permit shield for the process drains from Regulation 8, Rule 8 based on a statement that no requirements exist. Rule 8-8 includes storm water, sewer systems, junction boxes, and sewer lines (Sections 216-218). If the District wishes to provide a shield, please document that process drains are excluded from these definitions and are not covered by other sections of the rule; or document why each process drain, covered by Rule 8-8, would not be subject to any requirements under Rule 8-8.

SULFUR TREATMENT EMISSIONS

Applicable Requirements

Please add Rule 9-1-301 to the applicable requirements for the Sulfur Plants or explain in the Statement of Basis why this rule does not apply.

Monitoring

1. SCOT Unit: We would like to note that the monitoring conditions under Condition #12271- SO_x CEMs, total sulfur gas chromatography as BACT may be useful to evaluate for other refineries.

2. Less frequent testing based on a 50% compliance margin is proposed on p. 410 for SO_3/H_2SO_4 and particulate limits - see comment under combustion units/CO boilers/periodic monitoring, above.

3. Please explain in the Statement of Basis the origin of the variable H_2S limit that changes according to "% SJV crudes" in Table VII-AW for S1494, S1504, etc, and for utility CO Boilers 1, 2, and 3.

4. Sources 1431, 1432, 1765, and 4180 are all subject to Rules 6-301 (visible emissions), 6-310 and 6-311 (particulate emissions). However, no monitoring is included for any of these rules in Table VII-AH. The Statement of Basis states that for Sources 1431 and 1432, no monitoring for Rule 6-301 is required, and the Statement of Basis refers the reader to Note 5 for an explanation (see PM sources and discussion). However, there is no Note 5. The District exempts Sources 1765 and 4180 from Rules 6-301, 6-310, and 6-311, explaining in the Statement of Basis that these units are subject to an annual source test to determine compliance with the sulfur emissions limit of 6-330 (sulfur recovery units). Similarly, for Units 1431 and 1432, the Statement of Basis requires annual source tests to monitor for compliance with 6-330. An annual source test for sulfur is not sufficient to monitor for compliance with visible emissions and particulate limits. Please include more frequent monitoring to determine compliance with the requirements of 6-301, 6-310, and 6-311. In addition, please explain how the District will monitor for compliance with 6-330 between annual tests.

Enclosure F - Shell Martinez

SUPPORT FACILITIES

Please see Enclosure A - General Comments.

TANKS

Monitoring

1. Rules 8-5-320, 8-5-321, and 8-5-322 are applicable requirements for several tanks. However, no monitoring is included in the permit. Please add these rules to Section VII with the appropriate monitoring. For the appropriate monitoring requirements, please refer to the tank comments in the Tesoro permit (EPA letter to BAAQMD, dated September 26, 2003, Enclosure A, pp. 11-13).

2. Table VII-Y on page 439 mistakenly refers to 328.2 as the emissions limit citation. The correct reference is 328.1.2

3. Please explain the reason why the monitoring requirements specified in Section 8-5-402 were deleted from Table VII - P for the internal floating roof tanks on page 530. Tanks that are subject to the requirements of Section 8-5-305 should be inspected per Section 402. In addition, the monitoring requirements specified in this table pursuant to NSPS Subpart Kb are incomplete. The district should add the additional applicable requirements found in 60.113b.

4. Please explain why the monitoring requirements for NSPS Subpart Kb have been deleted from tables VII-X and VII-CN.

5. Source 952 should be added to the table of applicable limits and compliance monitoring requirements for the internal floating roof tanks (Table VII - P).

THROUGHPUT LIMITS ON GRANDFATHERED UNITS

The permit appears to be missing the general discussion that is included for other permits to prevent any misunderstanding that these limits could be relied upon to avoid NSR applicability. Please add this language to the permit to clarify that these limits trigger reporting requirements, and cannot be relied upon to presume that a unit is, or is not, subject to NSR (Throughput Limits, Section VI, Condition #18618).

Federal Enforceability

We understand that other throughput limits are federally enforceable limits. Are the capacities listed in Condition #4303 limited to the permit limit, or can Shell exceed them based on "maximum allowable capacity?"

WASTEWATER TREATMENT

Applicable Requirements

1. Table IV-DQ details the applicable requirements of 40 CFR Part 60, Subpart QQQ for individual drain systems. Please note that the oil-water separators, including slop oil vessels, are also subject to Subpart QQQ.

2. Please verify that sludge dewatering does not occur at the facility. If this process does occur, Rule 8-8-304 may apply.

3. Table IV-M, Tank 532: Please add citations for 61.357(d)(2), (d)(6), and (d)(7). Please also add to monitoring citations in Table VII for this source. Please do the same for all tanks subject to 61.357(d).

4. Table IV-DV (p.305), refinery-wide requirements: 61.357(d)(2) and (5) are included as applicable requirements. Please add 61.357(d)(6), (7), and (8) or explain why these requirements are not applicable. Also, the monitoring requirement of 61.357(d)(5) applies if the owner/operator elects to comply with 61.342(e). If 61.342(e) is the chosen option, then the applicant should demonstrate that the flow-weighted annual average water content of facility waste is greater or equal to 10%, as described in 61.342(e)(2). Facility waste with less than 10% is subject to 61.342(c)(1).

5. In our review of the permit, we did not see any permit conditions or requirements for S1467 and S5117 (biotreaters). These units may be subject to 40 CFR Part 61, Subpart FF (e.g., 40 CFR 61.348 and/or CFR 63 Subpart CC). Please explain if these units are subject to any applicable requirements.

6. Sewer pipelines and process drains are not listed in Section II of the permit, though some may be subject to 40 CFR Part 61, Subpart FF and/or 40 CFR Part 63, Subpart CC. Please explain if these units have any applicable requirements.

7. It appears that the emissions from the CPI Oil/Water Separator (S1779) are routed to a water scrubber and subsequently to a carbon adsorption system. If the entire system (CPI separator, water scrubber, and carbon adsorption system) is a closed vent system, please add a permit condition to include the requirements of 61.347(a)(1).

8. Please provide an explanation as to whether the wastewater ponds (S-1466, S-1468), wastewater separator dubbs box (S-2009), wastewater junction boxes (S-2010), wastewater collection sumps (S-2011), Final EPT 1 & 2 Holding Ponds 5C & 5D (S-2014), and Bioclarifiers (S-5118 & S-5119) are subject to 40 CFR Part 61, Subpart FF and/or 40 CFR Part 63, Subpart CC.

9. If the CPI Oil/Water Separator (S1779) is part of the wastewater treatment system, it may be subject to 40 CFR 61.347 and any related monitoring, recordkeeping, and

reporting requirements in this Subpart FF, as well as MACT Subpart CC. Please provide a determination in the Statement of Basis.

Monitoring

1. Benzene Waste NESHAP: Please explain the basis for 61.354(d) alternate monitoring in the Statement of Basis (Condition #4298). As noted in prior comments, EPA approval is necessary for NSPS alternate monitoring.

2. Tank 532: Please add monitoring citations for 61.357(d)(2), (d)(6), and (d)(7). Please do the same for all tanks subject to 61.357(d).

3. Please clearly define the recordkeeping requirements of 61.356.

4. Carbon absorption systems: Please add the requirements of 61.354(d) to monitor for carbon breakthrough.

GENERAL COMMENTS (MISCELLANEOUS UNITS AND STATEMENT OF BASIS)

Applicable Requirements

Coke Handling conditions may serve as an example for other permits (Section VI, Condition #12271): 8 % moisture content to limit crusher emissions; analyze once per day; and other dust-control measures.

Monitoring

1. In the PM source table (Statement of Basis), the District refers to Note 5 to explain why several sources are not subject to PM monitoring. Note 5 is not included in the PM discussion. Please explain why all sources that refer to Note 5 are not subject to PM monitoring.

2. Sources 1502, 1503, 1540, 4021, 4171, and 4161 (various units) are subject to Rules 6-301 and 6-310. However, no monitoring requirements are included in Table VII, nor is any explanation given in the Statement of Basis. Please add appropriate visible emissions monitoring to Table VII for these sources or provide an explanation in the Statement of Basis to justify why none is needed.

3. The Table VII-CE "process swing gas" limit monitoring should be continuous, since the facility is subject to continuous monitoring of the fuel gas H2S pursuant to NSPS Subpart J. If the facility has requested alternate monitoring under 60.13(i), please explain whether EPA has approved this request. Also, please explain how record keeping would demonstrate compliance with the Flexigas H_2S limit when fuel gas is continuously monitored for H_2S.